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A

COMPARATIVE GRAMMAR

OF THE

INDO-GERMANIC LANGUAGES.

Da muss sich manches Rätsel lösen
Doch manches Rätsel knüpft sich auch.

Goethe.

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A

COMPARATIVE GRAMMAR

OF THE

INDO-GERMANIC LANGUAGES.

A CONCISE EXPOSITION

OF THE HISTORY

OF SANSKRIT, OLD IRANIAN (AVESTIC AND OLD PERSIAN), OLD ARMENIAN, GREEK, LATIN, UMBRO-SAMNITIC, OLD IRISH, GOTHIC, OLD HIGH GERMAN, LITHUANIAN AND OLD CHURCH SLAVONIC

BY

KARL BRUGMANN,

PROFESSOR OF COMPARATIVE PHILOLOGY IN THE UNIVERSITY OF LEIPZIG.

VOLUME III.

MORPHOLOGY, PART II:

NUMERALS. INFLEXION OF NOUNS AND PRONOUNS.

TRANSLATED FROM THE GERMAN

BY

R. SEYMOUR CONWAY, M. A. AND **W. H. D. ROUSE, M. A.**

FELLOW OF GONVILLE AND CAIUS COLLEGE, CAMBRIDGE, AUTHOR OF 'VERNER'S LAW IN ITALY'.

FELLOW OF CHRIST'S COLLEGE, CAMBRIDGE, ASSISTANT MASTER AT CHELTENHAM COLLEGE.

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TO

JOHN PEILE,

DOCTOR OF LETTERS, MASTER OF CHRIST'S COLLEGE, THE FOUNDER OF THE STUDY OF COMPARATIVE PHILOLOGY IN CAMBRIDGE

THIS TRANSLATION IS DEDICATED

IN TOKEN OF THEIR GRATITUDE AND AFFECTION

BY

HIS OLD PUPILS.

TRANSLATOR'S PREFACE.

In this volume I have used, though sparingly, the terms suggested in the preface to volume II — *re-formate (formate)*, *ad-formate*, *transformate*. These are applied to single words, as on p. 30, Rem. 1. When a word is modified by the analogy of another, it is said to be an *ad-formate* of it (p. 29, line 7 from the bottom, is an example). In its new shape it is *transformed from* the old, or a *transformate of it* (p. 44, footnote). Absolutely regarded, it is a *re-formate* (sometimes, where there can be no mistake, the simple word *formate* stands). *Re-formation* and *transformation* are used when not single words, but groups, come in question (as p. 90, line 6 from bottom); also when certain sound changes are exemplified by the words cited (as the *z* in *sibunzo ahtozo*, p. 40). These terms may by ugly, but they are so very convenient that their ugliness will, it is hoped, be forgiven.

In such words as *Pāli, Prākrit, Gāthic* the quantity has not always been marked. It seemed needless to do so when this had been indicated often enough to ensure its being remembered.

The word polysyllable is used to include dissyllables, unless otherwise implied.

I had hoped to get out this volume by Christmas last. The delay is due partly to the waste of time in sending proofs to and fro from Germany, and partly to the almost ceaseless pressure of other duties.

Mr. Conway's criticism and advice has been very useful all through, and I take the opportunity of thanking him for it.

W. H. D. Rouse.

Cheltenham, May 30, 1892.

CORRIGENDA TO VOLUME II.

page X line 1 for *mascnline* read *masculine*
„ *23* „ *19* „ *Classe* „ *Classes*
„ *360* „ *14* „ from below for -*i̯ēn*- read -*i̯ēn*-., with stop.
„ *366* „ *5* „ for 116 read 116 —
„ *395* „ *15* „ „ *ϝιδόντ-τα* read *ϝιδό-ντ-α*
„ *434*, footnote 2) „ live „ line
„ *437 line 11* from below for *novějĭ* read *nově-jĭ*
„ *443* „ *12* „ „ „ *δεῖ-ώς* „ *εἶδ-ώς*
„ *474* „ *13* „ „ „ *gełtà-* „ *gełtà*
„ *486* „ *9* „ „ „ **snu̯-ái̯* „ **snu̯-ái̯*

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THE NUMERALS.[1])

§ **164**. In the original Indo-Germanic language, the numerals 1 to 999 were expressed in one of three ways. Some were simple words, as **tri-* 'three' (Skr. *tri-*); some were compounds, as

1) Bopp, Vergl. Gr. II[3] 55 ff. Schleicher, Compend.[4] p. 477 ff. Bopp, Über die Zahlwörter im Sanskr., Griech., Lat., Litth., Goth. und Altslaw., Abh. der Berliner Akad. 1833 p. 163 ff. Lepsius, Über den Ursprung und die Verwandtschaft der Zahlwörter in der Indogerm., Semit. und der Koptischen Sprache, in 'Zwei sprachvergleichende Abhandlungen', Berlin 1836, p. 81 ff. J. Grimm, Geschichte der deutsch. Sprache[3] 167 ff. Pott, die quinare und vigesimale Zählmethode bei Völkern aller Welttheile, nebst ausführlichen Bemerkungen über die Zahlwörter Indogermanischen Stammes, Halle 1847. *Id.*, Die Sprachverschiedenheit in Europa an den Zahlwörtern nachgewiesen, sowie die quinäre und vigesimale Zählmethode, Halle 1868. E. Schrader, Über den Ursprung und die Bedeutung der Zahlwörter in der indoeurop. Sprache, Stendal 1854. Zehetmayr, Verbalbedeutung der Zahlwörter, als Beitrag zur Beleuchtung des ursprüngl. Verhältnisses der indogerm. Sprachen zum semit. Sprachstamme, Leipz. 1854. W. Wackernagel, Über Zahl und Ziffern, Michaelis' Ztschr. für Stenogr. 1855. Bernloew, Recherches sur l'origine des noms de nombre japhétiques et sémitiques, Giessen 1861. Krause, Über den Ursprung und die Bedeutung der Zahlwörter, Ztschr. für österr. Gymn. 1865 p. 867 f. J. Schmidt, Über einige numeralia multiplicativa, Kuhn's Ztschr. XVI 430 ff. — Ed. Müller, Sprachvergleichendes über die Numeralia, Fleckeisen's Jahrbücher für class. Phil. 97, p. 535 f. Ascoli, Über eine Gruppe indogermanischer Endungen, Krit. Stud. 85 ff. Osthoff, Formassociation bei Zahlwörtern, Morph. Unt. I 92 ff. J. Baunack, Formassociation bei den indogerm. Numeralien mit besonderer Berücksichtigung der griechischen, Kuhn's Ztschr. XXV 225 ff. J. Wackernagel, Zum Zahlwort, *ibid.* 260 ff. The Author, Die Bildung der Zehner und der Hunderter in den idg. Sprachen, Morph. Unt. V 1 ff., 138 ff., 268.

**du̯ō-dek̑m̥* 'twelve' (Skr. *dvá-daśa*); and some were expressed by phrases, as **trei̯es qe u̯ī̆k̑m̥ti qe* 'twenty-three' (Skr. *tráyaś ca viṣ̌atíś ca*). Simple words existed only for the numbers 1 to 10, and 100.

We find in the second stage, when the various branches of the language had begun to develope on their own lines, simple words for 1000, as Skr. *sa-hásra-m*, Gr. Lesb. *χέλλ-ιοι*; but it is uncertain whether a corresponding form **ĝheslo-* existed in the proethnic period, or whether the phrase 'ten hundreds' (cp. Skr. *daśa-śatī* f.) was the sole expression for this number. If the simple words for 1000 were not earlier than the second stage, the change was similar to one which took place in Greek, where Homer's *δεκά-χειλοι* '10,000' was replaced later by *μύριοι*.

The word **dek̑m̥* 'decem' played an important part in the Indo-Germanic decimal system. It is in the highest degree probable that the Indo-Germanic elements **-k̑m̥t-* and **-k̑omt-* which appear in the expressions for multiples of ten (Gr. Dor. *ϝί-κατι* and

---

Whitney, Sanskrit Grammar, p. 160 ff. Spiegel, Gramm. d. altbaktr. Spr. p. 176 ff. — G. Meyer, Griech. Gr.[2] p. 372 ff. The Author, Gr. Gr. (Iwan Müller's Handb. II[2]) p. 135 ff. Ahrens, Ein Beitrag zur Etymologie der griech. Zahlwörter, Kuhn's Ztschr. VIII 329 ff. H. Ebert, Quaestionum de vocabulorum cum numeralibus Graecis compositorum formis ac significationibus specimen, Spandau 1858. — Stolz, Lat. Gr. (Iwan Müller's Handb. II[2]) p. 349 ff. Neue, Formenlehre der lat. Spr. II[2] p. 144 ff. Merguet, Die Entwickelung der lat. Formenbildung p. 132 ff. Aufrecht, Die lat. Zahladverbien auf *iens*, Kuhn's Ztschr. I 121 ff. — Zeuss-Ebel, Gramm. Celt.[2] p. 300 sqq. Stokes, Bezzenb. Beitr. XI 166 ff. — J. Grimm, Deutsche Gramm. III 226 ff., 634 ff. *Id.*, Über die zusammengesetzten Zahlen, Germania I 18 ff. Holtzmann, Über das deutsche Duodecimalsystem, Germania I 217 ff. *Id.*, Das Grosshundert bei den Gothen, *ibid.* II 424 f. Rumpelt, Die deutsch. Zahlwörter sprachvergleichend dargestellt, Bresl. 1864. *Id.*, Die deutschen Pronomina und Zahlwörter, 1870. Scherer, Zur Gesch. der deutsch. Spr.[2] 576 ff. Kluge, Zu den german. Numeralien, Paul-Braune's Beitr. VI 393 ff. *Id.*, Paul's Grundriss I 402 ff. — Schleicher, Temy imenŭ čislitelnychu vu litvo-slavjanskomŭ i německomŭ jazykachu (Priloženie kŭ X. tomu zapisokŭ Imp. Ak. Naukŭ), St. Petersburg 1866. *Id.*, Lit. Gr. p. 149 ff. Kurschat, Gr. der litt. Spr. p. 259 ff. Miklosich, Vergl. Gr. IV 51 ff. Leskien, Handb. der altbulg. Spr.[2] p. 78 ff. — Reference may also be made to the discussion of the Lycian numerals by Deecke, Bezzenberger's Beitr. XIV 181 ff. (see especially p. 240 ff.).

τριά-κοντα, etc.), and the word **k̑m̥tó-m* 'centum', were connected with **dek̑m̥*, and came from **-dk̑m̥t-* **-dk̑omt-* and **dk̑m̥tó-m*, syncope having taken place because the first syllable was unaccented (I § 310 p. 247); see Scherer Zur Gesch. der deutsch. Spr.[2] 579, Bugge Bezz. Beitr. XIV 72.

We are in the dark as to the precise significance of the original Indo-Germanic words for 'two' and all the following numerals. Many conjectures have been put forward, some of them not at all amiss. It has been suggested, for example, that **ter-* **tr-i-* 'three' may have been a name for the middle finger, connected with Skr. *tár-man-* 'top of the sacrificial pillar' Gr. *τέρ-θρο-ν* 'end, point, top'; **peŋqe* 'five' has been compared with Goth. *figgr-s* 'finger' (cp. O.H.G. *fūst* O.C.Sl. *pęstĭ* 'fist' for **pn̥əqsti-s*, II § 101 p. 306), [and the slang phrase for a fist, *bunch of fives*]; and **dek̑m̥* 'ten' with Gr. *δέκομαι δέχομαι* I receive'[1]). But many others are certainly far from the mark, as Zehetmayr's, in the work cited on the first page.

Our attention will be given first to Cardinal Numbers, to Abstract Numerals — so far only as they are used along with adjectival cardinal numbers in ordinary reckoning — and to the Ordinals. The Abstract Numerals are derived from the Cardinals by the suffixes *-ti-* and *-t-* *(-d-)*, which serve as secondary suffixes in other abstract forms besides these (see II § 99 p. 293, § 101 p. 306 f., § 123 p. 390). Some of them were used in the proethnic period along with ordinary numerals; instead of 'ten men', for instance, the expression 'a ten of men' served equally well. Sometimes they even drove the cardinals out of the field altogether; in Balto-Slavonic **dek̑m̥* is not represented, but only **dek̑m̥-t(i)-*, which appears in Lith. as *deszimt(i)-*, in Slav. as *desęt(ĭ)-*. The Ordinal Numerals contain *-to-* and *-mo-*, suffixes used in comparison; a conjecture as to the origin of these has been given in II § 72 Rem. p. 167 and § 81 Rem. 1 p. 242.

1) Scherer, *op. cit.* p. 578: "It therefore seems most natural to regard the word as an ancient expression for both hands held out to receive something".

CARDINALS, ABSTRACT NUMERALS, AND ORDINALS.

§ **165.** One. In the original language, one or more derivatives from a pronominal stem *oi̯-* served to express 'one': cp. Gr. Ital. Kelt. Germ. Balto-Slav. **oi̯-no-s* (Skr. has an enclitic *ēna-* with the meaning 'he'), Iran. Gr. **oi̯-u̯o-s*, Skr. **oi̯-qo-*.

Aryan. Skr. *ḗ-ka-s*. Avest. *aę-va-* *ōi-va-*, O.Pers. *ai-va-*.

Greek. *οἰ-νό-ς* *οἰ-νή* 'ace, the number one on a die', *οἰνὴ παρὰ τοῖς Ἴωσι μονάς* (Pollux VII 204), *οἰνίζειν· τὸ μονάζειν κατὰ γλῶτταν* and *οἰνῶντα· μονήρη* (Hesych.). Then there is the Homeric *οἰέτης* 'of the same age, contemporary', which Wackernagel (Kuhn's Ztschr. XXV 280) derives from **οἰϝο-ϝετης* by syllabic dissimilation (I § 643 pp. 481 f.), whilst *οἶο-ς* Cypr. *οἶ-ϝο-ς* meant 'alone'.

Italic. Lat. *oi-no-s* *oeno-s* *ūnu-s*, Umbr. unu 'unum' Osc. úín[itú 'unita'.

Remark. Many scholars connect *ḗ-ka-s* with Lat. *aequo-s* and Gr. *αἶσα* 'equal portion' (for **αἰκ^{u}ι̯α*). If **oi̯-* belongs to the stem *o-*, **ai̯-* might be connected with the feminine stem *ā-* (§ 409). But at the same time such forms as Lat. *auri-s*: Gr. *οὔατα* suggest the possibility of a similar vowel variation here. — See Hübschmann, Das idg. Vocalsystem pp. 190 f.

Old Irish. *oe-n*.

Germanic. Goth. *ái-n-s* O.H.G. *ei-n* O.Icel. *ei-nn*.

Balto-Slavonic. Lith. *v-ḗna-s* (cp. I § 666. 1 p. 526), Pruss. acc. *ai-na-n*. O.C.Sl. *i-nŭ* (cp. I § 84 p. 82, § 666. 3 p. 527), which in composition means 'one', as *ino-rogŭ* 'one-horned animal, unicorn'; elsewhere it has the meaning 'alter, alius'.

**sem-* was another word for 'one' in the parent language. The idea originally conveyed by it was probably that of being together or united. This became the regular numeral in Armenian and Greek: Armen. *mi* (gen. *mioǰ*) for **sm-i* (I § 560 p. 416); Gr. *ἑν-* instead of **ἑμ-*, nom. masc. in the dialect of Gortyn *ἕν-ς* Att. *εἷς*, fem. *μία* for **σμ-ια*, *μῶνυξ* 'one-hoofed' for **σμ-ωνυξ* (II § 160 pp. 479 f.). Compare Skr. *sa-kŕ̥t* 'once' Gr. *ἅ-παξ* 'once' *-άπλόο-ς* 'single, simple', Lat. *sim-plex*, *sin-gulī*,

semel (see § 182), *sem-per* 'in one unbroken sequence, always', Goth. *simlē* 'once, once upon a time'.

Isolated forms, of doubtful origin, are Hom. Gort. *ἰῷ* Lesb. Thess. *ἴα* (cp. Osthoff, Morph. Unt. IV 186 f.), and Slav. *jedinŭ jedĭnŭ*, the regular word for 'one' in that language.

First. In all periods, from the proethnic onwards, ordinals for this number were formed from the √*per-*, which is seen in Gr. *πέρᾱν πέρ-νσι πρό* etc. (Fick, Wörterb. I³ 140 ff.), by means of the suffixes *-u̯o-* (Ar., Gr., Slav.), *-mo-* (Ital., Germ., Balt.), *-tm̥mo-* (Ar.) and *-isto-* (West-Germ. and Norse).

**pr̥-u̯o-*, **pr̥̄-u̯o-*. The former became O.C.Sl. *prĭ-vŭ*, the latter is seen in Skr. *pūrv-iyá-s pū́rv-iya-s* (also *pū́rva-s* 'situated before'); Avest. *pourviya- paoirya-*; Gr. *πρῶτο-ς* Dor. *πρᾶτο-s* for **πρωϝ-ατο-ς*, besides which we have forms without the extension *-ατο-* (cp. *τρίτ-ατο-ς* § 167), Dor. *πρᾶν* 'formerly' for **πρω-ϝᾱ-ν*, and (with the suffix *-i̯o-*) *πρῴην* 'recently' for **πρω-ϝ-ιᾱ-ν*. Cp. I § 306 p. 242, II § 63 p. 133, § 64 p. 134. Apparently we must assume a form **pro-u̯o-* for Goth. *fráuja* 'lord', O.H.G. *frō* 'lord' *frouwa* (= Goth. **fráujō*) 'lady'; this **pro-u̯o-* will be related to **pr̥-u̯o-* in the same way as **pro-mo-* to **pr̥-mo-*.

**pr̥-mo-*. Goth. *fruma* O.Sax. *formo* A.S. *forma*. Lith. *pìrma-s*. Cp. O.Ir. *rem-* 'ante, prae' II § 72 p. 168 and Lat. *prandiu-m*, which Osthoff is probably right in explaining as **pram-(e)d-i̯i̯o-m* 'early food' (cp. Morph. Unt. V p. III). **pro-mo-* is seen in Umbr. prumum *promom* 'primum': cp. Gr. *πρόμο-ς* 'front man, front warrior, leader, prince' Goth. *fram-aldrs* 'advanced in age'. *-mo-* also occurs in Lat. *prīmu-s* Pelign. *prismu* 'primo' or 'primum' (I § 570 p. 427, II § 72 p. 168), which, like *prīs-cu-s* and *prīs-tinu-s*, is derived from a comparative form connected with *prius* (II § 135 pp. 433 f.).

-tm̥mo-: Skr. *pra-thamá-* (for the *th* cp. II § 73 p. 178), Avest. *fra-tema-* O.Pers. *fra-tama-*. Cp. Avest. *fra-tara-* Gr. *πρό-τερο-ς* 'former, earlier'.

-isto-: O.H.G. *furist* A.S. *fyrst* O.Icel. *fyrst-r*. Cp. O.H.G. *furiro* 'earlier, superior'.

Alban. *i-parε* 'first' belongs to the same root as these words.

Words derived from other roots:

Skr. *ādya-s* from *ā-dí-ṣ* 'beginning'; and later *ādi-má-s*.

Armen. *nax* and *arajin*, the latter from *araj* 'foremost side, front, origin, beginning' (cp. *verj-in* 'last' from *verj* 'end', *ver-in* 'highest' from *ver* 'above', and the like).

O.Ir. *cēt-ne*, in composition *cēt-*, Mod.Cymr. *kyntaf*, Gall. *Cintu-* in proper names, such as *Cintu-gnātu-s* ('primigenitus'); perhaps, as Thurneysen conjectures, this is connected with Goth. *hindumist-s* 'extreme, outermost' A.S. *hindema* 'last', since the ideas of 'first' and 'last' are easily interchanged. In Irish there is a further form *oen-mad*, used where larger numbers follow; here the termination *-mad* has come from *sechtm-ad* 'seventh' *dechm-ad* 'tenth', where *m* is part of the stem.

§ **166.** Two.[1]) The stem is **du̯o-* **du̯u̯o-* (I § 117 p. 109); in composition and in some ordinary derivatives we have **du̯i-*, a form which recals **tr-i-* 'three' (cp. II § 13 p. 28) and **u̯-i-* 'two' in *ϝί-κατι* etc. (§ 177). I find it impossible to agree with Bartholomae (Ar. Forsch. III 39), who conjecturally restores **du̯ōi̯-* **du̯oi̯-* **du̯i-* as the primitive base of this numeral.

Skr. *dvāú dvá* (*duvāú duvá*), fem. neut. *dvē* (*duvē*). Avest. *dva*, fem. *duyē* (cp. Bartholomae, Handb. § 92 p. 40).

Gr. *δύω* (used for both masc. and fem., like Lat. *duo* and Lith. dialectic *dù*, cp. also *τὼ στήλᾱ* § 426), *δύο* (which was perhaps originally the neuter, see § 293); *δώ-δεκα* for **δϝω-*. The Dor. and Later Att. *δυσί* Lesb. *δύεσι* or *δύεσσι* Thess. *δύας* are re-formates, apparently caused by *δυῶν* (*δυοῖν*); the relation of *τρισί*: *τριῶν* made it seem natural to coin *δυσί* as dative to *δυῶν*. *δοιοί* cannot be derived from **du̯oi̯o-* (cp. I § 130 pp. 117 f.); possibly it came from **du̯oi̯-i̯o-*, cp. Skr. *dvē-dhā́* 'double, twice' and §§ 297, 311.

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1) Benfey, Das indogerm. Thema des Zahlworts 'zwei' ist *DU*, Götting. 1876. — Zander, De vocabuli *δύο* usu Homerico Hesiodeoque et Attico, I, II, Königsberg 1834, 1845. — Meringer, Die Flexion der Zweizahl, Kuhn's Ztschr. XXVIII 234 ff.

Lat. *duo*, fem. *duae* (cp. §§ 285, 286), acc. *duo, duōs*, *duās*, dat. *duō-bus*, *duā-bus*. In Umbrian the inflexion is plural throughout: nom. masc. *dur*, acc. masc. fem. tuf, nom. acc. neut. tuva (cp. Lat. *dua* beside *duo*).

O.Ir. *dau dō*, older *dāu*, and also *dā* (§ 285), fem. *dī*; O.Cymr. Mid.Bret. masc. *dou*.

Goth. *tváí*, neut. *tva*, fem. *tvōs*; dat. *tváim*, gen. *tvaddjē* (see § 311). The Germanic dialects show various re-formates among the cases, as O.H.G. *zwēne*, which are not yet satisfactorily explained; the latest discussion of them is by Kluge in Paul's Grundriss I 403.

Lith. masc. *dù* for **dvû́*, fem. *dvì* for **dvĕ́*, see I § 184 p. 160, § 664. 3 p. 523. O.C.Sl. *dva dŭva*, fem. neut. *dvě dŭvě*.

**du̯i-*. Examples of this base in composition are: Skr. *dvi-pád-* Gr. *δί-πους* Lat. *bi-pēs* A.S. *twi-fēte* 'two-footed', O.H.G. *zwi-valt* 'two-fold'. In derivatives: **du̯i-qo-* : Skr. *dvi-ka-* 'consisting of two' Gr. *δισσό-ς διττό-ς* 'two-fold' for **δϝι-κ-ι̯ο-ς*, O.H.G. *zweho* 'doubt' A.S. *twiȝ* 'twig, branch' (II § 86 p. 257). In Italic we find *du-* (as well as **du̯i-*): Lat. *du-plu-s du-plex du-centī* (cp. § 180), Umbr. *du-pursus* 'bipedibus'; this was a re-formation, developed possibly with the aid of *quadru-* (II § 34 p. 61).

Remark 1. Side by side with Lat. *bi-*, *dui-* is found twice in composition, *dui-dēns* and *dui-cēnsus* (Paul. Fest.). This, like O.Lat. *duis* = *bis* (§ 182), may have preserved an Idg. **du̯u̯i-* (cp. Ved. *duviš* beside *dviš*), or it may simply be a modification of *bi-* on the analogy of *duo* (and of *du-*); I leave the matter undecided. In either case we may reject the view of Skutsch (De nominum Latinorum compositione, Nissae 1888, p. 35), who holds that *bi-* arose from the *dui-* which is preserved in these two compounds. On the other hand, I agree with this scholar in regarding *di-* in late compounds (as *di-lōris*) as borrowed from the Greek *δι-* (p. 36).

Armen. *erku* (gen. dat. *erku-ç*), of uncertain origin. Bugge (Beitr. zur etym. Erläuterung der arm. Spr., 41 f.) derives the word from **ku-* = Idg. **du̯ō(u̯)*, with *er-* prefixed on the analogy of *erek* 'three'; a most daring suggestion. Fr. Müller would connect it with Suanian *jéru* Georgian *ori* 'two'.

Second. For this numeral the different languages show very different forms.

Skr. *dvi-tī́ya-s*, Avest. *bi-tya-* Gāthic *dᵃbi-tya-* O.Pers. *dūvītiya-* (I § 159 p. 143).

Armen. *erkir* and *erkr-ord* (for **erkir-ord*).

Remark 2. Perhaps *erkir*, like *çorir* 'fourth', was formed on the analogy of *eri-r* 'third'. The termination *-ord*, found in *erkr-ord* and all the numerals which follow, is very common in other words besides numerals: e. g. *hanapaz-ord* 'daily' from *hanapaz* 'always', *parap-ord* 'otiosus' from *parap* 'otium', *ors-ord* 'hunter' from *ors* 'hunt', *lc-ord* 'companion, σύζυγος' from *luc* 'yoke'. Petermann (Grammatica Linguae Armen. p. 162) and Bopp (Vergl. Gr. II³ 97 f.) offer very questionable conjectures as to its origin.

Gr. δεύτερος properly means 'removed to a distance from something, at a distance from it, coming after it in time or position' (δεύτατος is also found). It is etymologically connected with δεύομαι and the Sanskrit adj. *dū-rá-* 'far off, afar', and did not belong to the numerals until Greek had become a separate language. Its similarity in sound with δύω certainly had something to do with this new use. See the Author, Kuhn's Ztschr. XXV 298 ff.

Lat. *secundu-s*, connected with *sequor*; see II § 69 p. 161.

O.Ir. *aile* (Mid. Cymr. Mod. Bret. *eil*) = Lat. *aliu-s*, and *tānise*, which is connected with *imthānad* 'change', though nothing further is known of its etymology.

Goth. *an-þar* O.H.G. *andar*. Lith. *añtra-s* O.C.Sl. *vŭtorŭ*. Cp. II § 75 p. 198. It possibly may be analysed *vŭ-torŭ* (cp. Skr. *u-bhāú*), see § 285.

§ 167. Three. Idg. masc. neut. **tr-i-*. The *-i-* was a suffix, as is proved by such forms as Skr. *tr̥-tī́ya-s* Gr. Lesb. τέρ-το-ς.

Skr. *tráy-as*, loc. *tri-ṣú*. Avest. *þrāy-ō*, loc. *þri-šva*.

Armen. *ere-kʿ*, gen. dat. *eri-ç*, instr. *eri-vkʿ*, see I § 263 p. 213.

Gr. τρεῖς Gortyn. τρέες for *τρεϝ-ες, loc. τρι-σί; Hipponax has τριοῖσι, which was suggested by τριῶν (τρία). The Boeot. τρέ-πεδδα (beside τρί-πους etc.), taken in conjunction with Lat. *trĕ-centī*, Lith. *trẽ-czia-s* O.C.Sl. *tre-tĭjĭ* 'third' Lith. *tre-jì* 'three by three', seems to point to an old stem **tr-e-* (**tr-o-*).

Lat. *trēs*, dat. abl. *tri-bus*, Umbr. trif tref acc. 'tres' triia 'tria'.

O.Ir. *trī* dat. *tri-b*.

Goth. *þreis* dat. *þri-m*, O.H.G. *drī* dat. *dri-m*.

Lith. *trỹs* loc. *tri-sè*. O.C.Sl. *trĭj-e trij-e* loc. *trĭ-chŭ*.

For the feminine there was a special form in the parent language, preserved only in Aryan and Keltic, **tiser- *tisr-*: nom. Skr. *tisr-ás* (for the weak form of the stem see § 320) Avest. *tišar-ō*, O.Ir. *teoir* O.Cymr. *teir* (cp. I § 576 p. 431). It is conjectured that **tisr-* came from **tri-sr-* by dissimilation, and that its second part is identical with the second part of **su̯e-sor-* 'sister'; see Bugge, Bezzenb. Beitr. XIV 75 f. Skr. *cátasr-as* is a similar formation (see § 168).

Third. The Indo-Germanic languages have forms with *-to-*; those without the *-i-* of **tr-i-* may be considered the oldest: Skr. *tr̥-tī́ya-s*, Gr. Lesb. *τέρ-τος*, Lat. *ter-tiu-s* Umbr. *tertim* 'tertium', Pruss. *tir-ti-s* acc. *tir-tie-n* (*tir-* = **tr̥-*).

The following have **tr-i-*. Avest. *þri-tya-* O.Pers. *θ̌i-tiya-*. Gr. Att. etc. *τρί-το-ς*, and the Homeric *τρίτ-ατο-ς* on the analogy of *εἴνατο-ς δέκατο-ς*, cp. *πρῶτο-ς* for **πρωϝ-ατο-ς* § 165 p. 5 and *ἑβδόμ-ατο-ς* § 171. Lat. *trit-avo-s*, unless the true form of the word be *strit-avo-s*, see II § 81 p. 246. Mod.Cymr. *trydydd* for **tri-ti̯o-* or for **tr̥-ti̯o-*, we cannot tell which. With different suffixes: Armen. *eri-r* (and *err-ord* for **erir-ord*, cp. § 166 Rem. 2) and O.Ir. *tri-s*, in composition *tress-* (see II § 81 p. 247).

For *tr-e-* in Lith. *trẽczia-s* for **treti̯a-s* and in O.C.Sl. *tretĭjĭ*, see last page.

The last-named forms make it doubtful whether Goth. *þridja* O.H.G. *dritto* are derived from **tri-ti̯o-*, or from **tre-ti̯o-* (according to I § 67. 3 p. 57).

§ **168.** Four. The Idg. stem masc. neut. **qetu̯er- *qetu̯or-* had a variety of ablaut-forms; this was because there were several distinct weak-grade forms of the second syllable: **q(e)tur- *q(e)tūr- *q(e)tru- *q(e)tu̯r̥- *q(e)tu̯r̥̄-*. Cp. I § 155 p. 140, and J. Schmidt, Kuhn's Ztschr. XXV 43 ff. and 138, Pluralbild. 191 f.; Wackernagel, Kuhn's Ztschr. XXV 283 ff., XXVIII 136;

G. Meyer, Gr. Gr.[2] 376 f.; Osthoff, Phil. Rundsch. I 1592, Morph. Unt. IV 333; Kluge, Paul-Braune's Beitr. VIII 517 ff., Paul's Grundr. I 403 f.

The nom. plur. masc. in the original language would be **qetu̯or-es*: Dor. *τέτορες* Lat. *quattuor* Skr. *catvár-as*; neut. **qetu̯ōr *qetu̯ōr-ə*: Skr. *catvári*, Lat. *quattuor*, Goth. *fidvōr*, whose *ō* passed over into the masculine.

Skr. *catvár-as* acc. *catúr-as*; in composition *catur-* instead of pr. Ar. **catru-*. Avest. *caþwār-ō*; *catur-a-* 'occurring four times'; in composition *caþru-*, as *caþru-karana-* 'four-cornered', and *caþwar*^{e}*-*, as *caþwar*^{e}*-zaəgra-* 'four-footed'; the latter was probably suggested by *caþwar*^{e}*-sat-* '40' (see §§ 176, 178, and the Author, Morph. Unt. V 30). For the ablaut in the first syllable cp. Avest. *ā-xtūirya-* 'occurring four times' and the ordinals Skr. *túr-ya- tur-ī́ya-* Avest. *tūirya-* for **ktur-* (I § 646 p. 491).

Armen. *č̣or-k̆*, gen. *č̣or-i-ç*, from **qetu̯ŏr-* or **qetur-*, see I § 455 p. 336. Also *k̆ar-*, in *k̆ar-a-sun* '40', probably from **(q)tu̯ī̆-*, see §§ 176, 178.

Gr. Dor. *τέτορες*, Late Ion. *τέσσερες* Arcad. *τεσσερά-κοντα*, Lesb. *πέσυρες* Hom. *πίσυρες*, Att. *τέτταρες* Hom. *τέσσαρες* Boeot. *πέτταρες*, dat. Hom. *τέτρα-σι*. Cp. I § 166 p. 147. *π-* in *πέσυρες πίσυρες πέτταρες* can hardly have been taken over from **πτρα-* (*τράπεζα*) and **πτρυ-* (*τρυ-φάλεια*), since these had dropped their *π-* in the proethnic Greek period. More probably it came from *πέντε*. Two other forms are *τετρα-* and **(π)τρα-*. The former is seen in *τέτρα-σι, τετρά-κις* 'four times', *τέτρα-το-ς* (beside *τέταρτο-ς*) and in most compounds, as *τετρά-κυκλος* 'four-wheeled; the latter in *τρά-πεζα* 'table' for **(π)τρά-πεζα* (beside *ταρ-* in *τάρων* = *τεττάρων*, a word used by the comedian Amphis, and in *ταρτημόριον* = *τεταρτημόριον*, preserved by Hesychius [1]). *τετρα-* stands for **τετϝρα-* (**qetu̯r-*) and **(π)τρα-*

1) Hesychius' explanation, *τὸ τριτημόριον*, seems to be corrupt; read *τὸ τεταρτημόριον*. It is not at all probable that this word has preserved a form *ταρτο-* belonging to Skr. *tr̥tī́ya-s* Pruss. *tirti-s* 'third'.

for *(π)τϝρα- (*qtu̯r̥-), ϝ having been lost in proethnic Greek (the Author, Gr. Gr.[2] pp. 43, 71). τετρώ-κοντα for *qetu̯r̥̄-, see §§ 176, 178, 341. Τυρταῖο-ς, if Pott is right in adding this to the list (cp. Τριταῖο-ς), should be compared with Skr. *túr-ya-*; τυρ- instead of *πτυρ- on the analogy of τρυ-. With Homer's τεσσαρά-βοιο-ς 'worth four oxen' compare another Homeric form, ἐεικοσά-βοιο-ς (beside δυωκαιεικοσί-πηχυ-ς).

Lat. *quattuor, quadru-* (in composition), *quadrā-gintā* instead of **quettuor*, **quedru-*, **quedrā-*, being assimilated to *quartu-s* (see next page). *quattuor*, nom. pl. masc. and nom. acc. neut. (see last page), dropped its inflexions because the following numerals (*quinque* etc.) were not inflected. *quadrā-* stands for **qetu̯r̥̄-*, see §§ 176, 178. *-d-* has taken the place of *-t-*, reminding us of a similar change of the breathed to the voiced sound in *angulu-s* for **aŋklo-*, *septin-gentī septuā-gintā* (I § 499 p. 366, III § 177), Gr. ἕβδομο-ς O.C.Sl. *sedmĭ* (§ 171). Umbr. *petur-pursus* 'quadrupedibus', Osc. *petora* 'quattuor' (Fest.) and *petiro-pert* 'quater'.

O.Ir. *cethir* (dat. *cethrib*), O.Cymr. *petguar*. Gall. *Petru-coriu-s* and *petor-ritum* 'four-wheeled vehicle'.

Goth. *fidvōr* for **fidvōr-(i)z* like *stiur* 'steer, ox' for **stiur(a)-z* (I § 660. 6 p. 516, III § 194), dat. *fidvōri-m*, see § 169; *fidur-dōgs* 'lasting four days' (*fidūr-*? or *fidŭr-* instead of **fidaúr-* because the second syllable was unaccented?). The *t*-sound which appears in Gothic is not found elsewhere, except in A.S. and O.Swed. compounds; e. g. A.S. *fyđer-fēte* 'four-footed' for pr. Germ. **fíþur-* (II § 19 p. 36). O.H.G. *fior* O.Sax. *fiwar* A.S. *feówer* O.Icel. masc. *fjōrer* neut. *fjogor fjugur* point to a form **ku̯eku̯or-* **ku̯ekur-* before the great Sound-shifting (*Lautverschiebung*) in proethnic Germanic; for the change of *-ʒu̯-* to *-u̯-* see I § 444 *c* p. 330. I assume that in **ku̯etu̯or-*, *-tu̯-* was assimilated to the initial guttural (cp. **pempe* Goth. *fimf* for **peŋqe*, § 169 p. 14); then **ku̯etur-* followed suit, and became **ku̯ekur-*. In Gothic, on the other hand, *fidur-* held its ground, and *fidvōr* (instead of **fi(ʒ)vōr*) has been assimilated to it.

Remark 1. I have discussed this *-tu̯-* in Morph. Unt. V 53 f. It has been differently explained by Kluge in Paul-Braune's Beitr. VIII 517 ff., and in Paul's Grundriss I 403; but I do not feel convinced by his arguments.

Remark 2. Even in pr. Germ. this numeral was declined as an *i*-stem; e. g. O.H.G. *fiorin* like Goth. *fidvōri-m*. The same *i*-inflexion is seen in the numerals 5 to 12, as Goth. *fimfi-m* O.H.G. *finfin*. The origin of this inflexion is doubtful; perhaps the *i*-forms are to be traced to more than one source. See on this subject the Author, Morph. Unt. V 53 ff.

Lith. *keturì*, stem *ketur-ja-*, but acc. *kẽtur-is*, declined in the same way as the following numbers *penkì szeszì* etc. Side by side with this is found *ketverì* (stem *ketver-ja-*), the distributive — used as a cardinal numeral with plural substantives —, whose termination *-erì* spread to the numerals which followed (*penk-erì szesz-erì* etc.). The same suffix *-i̯o-* occurs in *tre-jì*, Avest. *ā-xtūirya-* 'occurring four times', Gr. *δοιοί δισσό-ς*, and in many other numerals (cp. § 183). From *ketver-ì*, *-i̯o-* passed over to the proper cardinal numeral, but the acc. *kẽturis* = Skr. *catúras* Gr. *πίσυρας* (common ground-form **qetur-n̥s*, § 333) was preserved by the aid of *trìs*, and then the numerals which followed were declined precisely like *keturì* (cp. the Author, Morph. Unt. V 55 f.).

O.C.Sl. *četyr-e*, gen. *četyr-ŭ* acc. *četyr-i*, fem. nom. acc. *četyr-i*. Distributive *četver-o*.

We trace an original fem. of **qetu̯er-*, answering to **tiser-* 'three' (§ 167 p. 8), in Skr. *cátasr-as* Avest. *catəṇr-ō* (I § 558 p. 415) and Mod.Cymr. *pedeir* O.Ir. *cetheoira cetheora*. These justify the conjecture that *-u̯er-* in **qetu̯er-* was a suffix of some kind.

Fourth. Skr. *catur-thá-s* and *túr-ya-s tur-ī́ya-s*, Avest. *tūirya-* (see p. 9).

Armen. *čor-ir čorr-ord* for **čorir-ord* and *kar-ord* (cp. § 166 Rem. 2 p. 7).

Gr. *τέταρ-το-ς* Hom. *τέτρα-το-ς* Boeot. *πέτρα-το-ς* (*π-* as in *πέτταρες*), ground-form **qetu̯r̥-to-*. *ταρτο-* ground-form **qtu̯r̥-to-* in *ταρτημόριον*. Cp. p. 10.

Lat. *quartu-s* for **qtu̯r̥-to-* (I § 306 p. 242), which no doubt became first **tu̯ar-to-*, and then *quarto-* through association with

quattuor. Prenest. *Quorta* (Schneider, Dial. Ital. I no. 217) is so isolated that I cannot venture on the strength of it to assume **qtu̯ṷ-to-* as well as **qtu̯ṷ̄-to-* for Italic; cp. Stolz, Lat. Gr.[2] p. 385. Osc. *trutum* 'quartum' trutas gen. 'quartae' (Bugge, Altital. Stud. 1878 p. 53 ff.) are formed from **qtrŭ-*.

O.Ir. *cethramad* formed after the analogy of *sechtmad* 'seventh' *dechmad* 'tenth'.

O.H.G. *fior-do* A.S. *feór-ða* beside O.H.G. *fior*, see p. 11.

Lith. *ketviř-ta-s* O.C.Sl. *četvrĭ-tŭ* ground-form **qetu̯ṷ-to-*.

§ **169.** Five. Idg. **penqe*. This number, along with the numbers 6 to 10, was indeclinable in the original language, and also more or less in Aryan, Armenian, Greek, Italic, Keltic, and Germanic during the historical period. We may conjecture that it is a survival from the time when the attributive adjective needed no case-endings. For example, Ved. *páñca kṛṣṭíṣu*, Gr. *πέντε δακτύλων*, Lat. *quinque virōrum*, Goth. *fimf hláibans*. But it came to be declined more or less frequently in all the different branches of Indo-Germanic except Italic: Skr. gen. *pañcānám*, Armen. gen. *hngi-ç*, Gr. Lesb. *πέμπων*, Mid.Ir. *cōic m-bō* 'quinque vaccarum', O.H.G. dat. *finfin* (inflected only where it followed the substantive). In Lithuanian alone *penkì* is invariably inflected from the earliest period at which we know the language (cp. last page). In Slavonic the adjectival numeral, along with those immediately following up to 10, had died out before the beginning of our record.

Skr. *páñca*, Avest. *panca*.

Armen. *hing*, see I § 330 p. 265, § 455 p. 336.

Gr. *πέντε*. *-π-* is regular (I § 427 p. 312) in Lesb. *πέμπων* (see above), and in *πεμπ-ώβολο-ν*, *πεμπάς πεμπάζω*; whilst in Lesb. *πέμπε* the *-π-*, and in *πεντώβολο-ν πεντάς* etc. the *-τ-* was due to form-association. In compounds, besides *πεντε-* (e. g. *πεντε-τάλαντο-ς*) we find *πεντα-* (e. g. *πεντα-κόσιοι*, *πεντά-πηχυ-ς*), which is a re-formation following the model of *τετρα-*, *ἑπτα-*, *ἐνα-*, *ἐννεα-*, *δέκα-*.

Remark 1. Two stems are found; *πεμπάς* like Skr. *pañcát-*, and a *ti*-stem with the same meaning, Skr. *panktí-ṣ* O.Icel. *fimt* O.C.Sl. *pętĭ*. The

first two words are ad-formates of *δεκάς* and *daš̌át-* respectively; and considering how widely the suffix *-αδ-* was used in Greek — *μονάς, ἑνάς, δυάς, τριάς, τετράς, ἑξάς, ἑβδομάς* (cp. *ἑβδομή-κοντα*) *ἑπτάς, ὀγδοάς* (cp. *ὀγδοή-κοντα*) *ὀκτάς, ἐννεάς, τετταρακοντάς, ἑκατοντάς, χιλιάς, μυριάς* — it is extremely doubtful whether there is any immediate historical connexion between *πεμπάς* and *pañcát-*. For the *-δ-* of *-αδ-* see II § 123 p. 392 and III § 178.

Lat. *quinque quīnque* (for *ī*, see Thurneysen in Kuhn's Ztschr. XXX 501 f.), Umbr. pumpeřias Osc. pumperias, equivalent to 'quintiliae' or 'quincuriae', Osc. Púmpaiians 'Pompeianus'. Pr.Ital. **ku̯eɒku̯e*, see I § 336 p. 267. *quincu-*, in *quincu-plex* etc., through association with *quadru-*.

O.Ir. *cōic*, O.Cymr. *pimp*, Gall. *πεμπεδουλα 'πεντάφυλλον'* (Dioscor.), see I § 436 p. 324. Pr.Kelt. **ku̯eɒku̯e*, see I § 339 p. 269.

Goth. *fimf* O.H.G. *fimf finf* (the *u* of O.H.G. *funf* is discussed below under the ordinal). Probably the second *f* is to be explained by supposing that **peɒku̯e* became **pempe* (cp. I § 444 Rem. 1 pp. 329 f.) as **ku̯etu̯or-* became **ku̯eku̯or-* (III § 168 p. 11). The *i*-inflexion, which we see in Goth. *fimfim* O.H.G. *finfin*, is discussed in § 168 Rem. 2 p. 12.

Lith. *penkì* and *penk-erì*, see § 168 p. 12.

In Slavonic, the cardinals 5 to 10 inclusive were represented by the abstract formation: *pętĭ* 'fivefold character, the number five' (= Skr. *paɒktí-ṣ̌* O.Icel. *fimt*) governing the gen. pl. of the thing. The old numerals were indeclinable, and this may have had something to do with their being dropped.

Remark 2. Be it observed in passing that the Albanian numerals 5 to 10 are based upon these same *ti*-abstracts: *pesε* 'five', *ǵaštε* 'six', *štatε* 'seven', *tetε* 'eight', *nεndε* 'nine', *δίεtε δiέtε* 'ten'. See G. Meyer, Albanes. Stud. II 50 ff.

Fifth. Idg. **pn̥q-to-* (which can be traced with certainty in Germanic, but nowhere else); and perhaps **peɒq-to-* too is proethnic (cp. **peɒqe*).

Skr. *pañcamá-s* (following *saptamá-s* etc.) and *pañca-tha-s* (cp. O.Ir. *cōiced*). Avest. *puxđa-* (for *-đ-*, cp. *uxđa-* I § 475 p. 351), according to von Fierlinger (Kuhn's Ztschr. XXVII 194), comes from **pn̥qto-*; but why should it have *u* and not *a*? The *u* reminds us of Gr. *πυγμή* Lat. *pūgnu-s*. Besides *puxđa-* we find the further form Avest. *paɒtaɒhe-m* acc. 'one-fifth'.

Armen. *hing-er-ord.*

Remark 3. For *-ord,* see § 166 Rem. 2 p. 8. The *-er-* which precedes *-ord* in this and the succeeding numerals is still unexplained.

Gr. *πέμπ-το-ς*, Gortyn. *πέντο-ς* (I § 427 *a* p. 312).

Lat. *quīntu-s Quīnctiu-s*, Osc. Púntiis *Πομπτιες* 'Quinctius'. The ground-form may be either **peəqto-* or **pə̯qto-*. Bartholomae (Kuhn's Ztschr. XXIX 503) conjectures that Lat. *quint-* Osc. *pont-* were the regular forms, while the cardinals were responsible for *-c-* in *quinct-* and *-p-* in *pompt-*.

O.Ir. *cōiced* O.Cymr. *pimphet*, see II § 81 p. 247.

Goth. *fimfta* in *fimfta-taíhunda* 'fifteenth', O.H.G. *fimfto finfto.* A form **fuəχta-* = **pə̯qto-* must be assumed for pr. Germ. to explain Mod.H.G. Swab. *fuchzē* '15' *fuft* 'fifth', O.H.G. *funfto funf*, Mod.H.G. Rhine-Frank. *fufzēn fufzich* etc.; see Kauffmann, Paul-Braune's Beitr. XII 512. Compare too O.H.G. *fūst* (pr. Germ. **fuəχsti-z*) O.C.Sl. *pęstĭ* 'fist' common ground-form **pə̯qsti-s*, II § 101 p. 306 f.

Lith. *peñkta-s.* O.C.Sl. *pętŭ* may stand for **peəq-to-* or **pə̯q-to-*.

§ 170. Six. Three forms may be restored with more or less probability. Iranian, Greek, and Keltic point to **su̯eks*; Armenian and Baltic to **u̯eks*; Sanskrit, Latin, Germanic, Baltic, and Albanian to **seks* (Alban. *ǵaště*, see G. Meyer, Alban. Stud. II 56 ff.). **su̯eks* and **u̯eks* would be parallel forms like √*su̯elq-* and *u̯elq-* 'draw' (Gr. *ἕλκω* Lat. *sulcu-s*: Lith. *velkù*) and other pairs of the same kind; see I § 589. 3 pp. 445 f. **su̯eks* and *seks*, again, recal such pairs as **su̯e-* (Skr. *svá-* 'suus' etc.) and **se-* (Avest. *hē hōi*, Lat. *sē*, Goth. *si-k*), **su̯esor-* (Skr. *svásar-* 'sister' etc.) and **sesor-* (Lith. *sesŭ* O.C.Sl. *sestra*) and so forth; see I § 170 p. 150, § 184 p. 160 (and see II p. 441 footnote 2), § 187 p. 162.

Both in the prehistoric parent language, and in the historic period of Aryan, Armenian, Greek, Italic, Keltic and Germanic, this word was indeclinable. For example: Avest. *xšvaš satāiš* 'with six hundred', Gr. *ἐξ ἡμέρᾱς*, Lat. *sex mēnsibus*, Goth. *afar dagans saíhs* 'after six days'. But it was sometimes inflected,

as Skr. *ṣaḍbhíṣ*, Armen. gen. *veç-i-ç*, Gr. ἕξασι or ἑξάσι (in an inscr. of the fourth century A. D., C.I.G. no. 5128. 27 *τοῖς ἑξασι βασιλείσκοις*) like *τέτρασι*, Mid.Ir. gen. *se m-bō* 'sex vaccarum', O.H.G. dat. *sehsin* (only used when the subst. precedes). The Latin word, *sex*, was never declined; the Lithuanian, *szeszì*, always.

Skr. *ṣáṣ* (*ṣáṭ*, see I § 401 Rem. 2 p. 297); cp. *ṣṓḍaśa* '16' for **ṣažḍaśa*, like *vṓḍhūm* for **važḍhu-m* (I § 404. 2 pp. 298 f.), and *ṣaṣṭhá-s* 'sixth'. Avest. *xšvaš*, also *xštva-*, which latter is regarded as standing for **xvšta-*. Apparently it should be assumed that there were two forms in proethnic Aryan, **sṵaš* and **saš*, which became **šṵaš* and *šaš* by assimilation of the sibilant. These would become quite regularly Avest. *xšvaš* (see Bartholomae, Ar. Forsch. III 20) and Skr. *ṣáṣ* respectively.

Armen. *veç* doubtless represents **ṵeks̑*; see I § 560 Rem. p. 417, § 589. 3 p. 446.

Gr. *ϝέξ* ἕξ for **sṵeks̑*. For *ἐκ ποδῶν, ἐγ δακτύλων, ἑκ-πλεθρο-ς ἑκ-μηνο-ς* etc. see the Author's Gr. Gr.[2] p. 71. *ἑξα-* in *ἑξα-κόσιοι* and other compounds follows the type of *τετρα-* *ἑπτα-* etc.

Lat. *sex*.

O.Ir. *sē* (cp. *mōr-feser* 'magnus seviratus') Mod.Cymr. *chwech* for **sṵeks̑*, see I § 175 p. 154, § 517 p. 377, § 576 p. 432, § 657. 10 p. 510. The second *s* has been preserved in the Irish *ses-ca* 'sixty' and *sess-ed* 'sixth'.

Goth. *saíhs* O.H.G. *sehs*, ground-form **seks̑*. Cp. p. 18 footnote 1.

Lith. *szesz-ì* (cp. *ketur-ì* § 168 p. 12) doubtless represents **seszì*, as *szeszura-s* represents **seszura-s* (I § 587. 2 p. 442). Pruss. *wuscht-s uscht-s* 'sixth'; probably we have a borrowed word in Lith. *ūszės* beside *szẽszios* pl. 'childbed'. Slavonic has the abstract, *šestĭ*: cp. Skr. *ṣaṣṭí-ṣ* ('group of six tens, sixty') O.Icel. *sētt*. *šestĭ* brings us to **chestĭ* at the first step backwards, and is doubtless one of the instances of *ch-* = *s-* (see I § 588 Rem. 3 p. 444); this change has not yet been satisfactorily explained.

Sixth. The parent language may have had the word **sṵek̑-to-s* (**se-*, **ṵe-*) : cp. Skr. *ṣaṣṭhá-s* Avest. *xštva-* (see above),

Gr. ἕκτο-ς, O.H.G. *sehto* O.Icel. *sētte sētti*, Lith. *szẽszta-s* Pruss. *wuscht-s* O.C.Sl. *šestŭ*. And the *-s-* of Lat. *sextu-s* Umbr. sestentasiaru 'sextantariarum' Osc. Σεστες 'Sextius', Goth. *saíhsta* O.H.G. *sehsto* (beside *sehto*) may have come from the cardinal. But it is uncertain whether or not pr. Idg. **su̯ek̑to-s* grew out of **su̯ek̑s-to-s* by a purely phonetic change. Who can tell whether the *-s* of **su̯ek̑s* was not an inflexional suffix? If so, it would not at first be found in the ordinal any more than (say) the *-e* of **pen̥qe* 'five' in **pen̥qto-s*. Cp. I § 589 Rem. 2 p. 446.

Armen. *veç-er-ord*.

O.Ir. *sessed* Mod.Cymr. *chweched*. As to the supposed origin of this re-formation see Zimmer, Kuhn's Ztschr. XXX 214.

§ 171. Seven. Pr. Idg. **septṃ*; the accentuation is inferred from Skr. *saptá*, Gr. ἑπτά and Alban. *šta-tɛ* (G. Meyer, Alban. Stud. II 65). Another form of the same stem, **septom-*, is perhaps to be inferred from Gr. ἑβδομήκοντα ἑβδομάς ἑβδομάκις O.Ir. *secht-moga* (cp. **-dk̑om-t-* beside **-dk̑m̥-t-* § 164 pp. 2 f.), see § 178.

The word was originally indeclinable: examples are Ved. *saptá síndhuṣu* 'in septem fluminibus' Avest. *hapta satāiš* 'with seven hundred', Goth. *sibun hláibans*; and Gr. ἑπτά, Lat. *septem*, O.Ir. *secht n-* were never declined. Inflected forms are: Skr. dat. abl. *saptá-bhyas*, Armen. gen. *evtan-ç*, O.H.G. *sibin-in* (only used where the subst. precedes). In Lith. only the word is always inflected, *septynì*.

Skr. *saptá*, later *sápta*, Avest. *hapta*; we may conjecture that the Skr. word was originally **saptám*, but followed the lead of *náva* and *dáśa*; see I § 226 p. 193, § 230 p. 196.

Armen. *evtn*, see I § 330 p. 265, § 560 p. 416. The final *-n* must be explained in the same way as that of *tasn* (§ 174).

Gr. ἑπτά, which we may conjecture should have been **ἑπτάν*, but took its present shape under the influence of ἐννέα and δέκα; see I § 226 p. 193, § 235 p. 198.

Lat. *septem*. In composition we find beside *septem-* the re-formation *septu- septi-*, like *octu- octi-*.

O.Ir. *secht n-* Mid.Cymr. *seith*; see I § 339 p. 269.

Goth. O.H.G. *sibun*. For the retention of *-n* (on the analogy of the ordinal Goth. **sibunda* O.H.G. *sibunto*, unless indeed it came from an older form **sibun-i*), see the Author, Morph. Unt. V 55[1]). As to the loss of *-t-* — we assume **septm̥* to be the Idg. ground-form — we must certainly not ignore Ascoli's theory that the parent language possessed two forms, one with *-t-* (**septm̥*), and one without (cp. Skr. *aśītí-ṣ* 'eighty' beside Idg. **oḱtōu̯*) which was kept in Germanic (see Ascoli's Krit. Stud. 101). But it is more natural to assume that there were two forms in proethnic Germanic, **septmó-* 'seventh' which became **sepmó-* and then **sebmó-*, and **septm̥*, which became **seftum* (this seems to be the form represented in the Salic Law by *septun* = *seftun*) and was then assimilated to **sebmó-* and became **sebum*; cp. Pruss. *sepma-s* beside *septma-s* 'seventh' and pr. Balto-Slav. **ošmo-* 'eighth' for **oštmo-* (§ 172). Sievers (Paul-Braune's Beitr. V 119) and Osthoff (Morph. Unt. II 51 f.) think that the *m̥*-form **septm̥* could become **sepm̥* in pr. Germ. by a direct phonetic change; cp. also Noreen, Urgermansk judl. p. 108.

Lith. *septyn-ì*, like *devyn-ì* 'nine' in its ending, and similar to *asztůn-ì* 'eight'. It may be conjectured that these three forms once were **septin(-ì)* **devin(-ì)* — cp. the ordinals *septiñ-ta-s* *deviñ-ta-s* — and **asztů(n-ì)*, and that their present shape is due to mutual assimilation. The long *ů* caused the lengthening of *i* to *y*; similarly the long vowel of *trýlika* etc. caused the lengthening of the antepenult in *vënů'lika* (p. 28), and that of Idg. **trī-* caused the lengthening in **qetu̯ī-* **peəqē-* (§ 178); many other examples might be found. **septin-ì* *septiñ-ta-s* instead of **septim-ì* **septim̃-ta-s* owe their *n* to **devin-ì* **deviñ-ta-s*.

O.C.Sl. *sedmĭ*, an abstract noun, beside *sedmŭ* 'seventh', was shaped on the analogy of *šestĭ* : *šestŭ* etc. (II § 97 p. 290). The

1) If it is assumed that there were proethnic forms, **sibun-i* **niun-i* **tehun-i*, ad-formates of **fimfi* = Idg. **peəqe*, it follows that O.H.G. *sehs*, which should have been **sihs*, must be regarded as modelled upon the analogy of *sehsto sehto*. For on this assumption there must have been a pr. Germ. **seχs-i*, which would then have become **siχsi*.

pr. Idg. abstract would doubtless be **septm̥-ti-s* : Skr. *saptatí-ṣ* ('seventy'), O.Icel. *sjaund.*

Seventh. Idg. **septmó-* (perhaps **sepdmó- *sebdmó-* may be inferred from Gr. *ἕβδομο-ς* O.C.Sl. *sedmŭ*; see I § 469 p. 345) and **septm̥mó-*. Possibly **septm̥-tó-* may also be regarded as proethnic.

Skr. *saptamá-s.* Also *saptátha-s* Avest. *haptaþa-.*

Armen. *evt̄n-er-ord.*

Gr. *ἕβδομο-ς* Epidaur. *ἑβδεμαῖο-ς*, cp. *ἑβδομήκοντα* Heracl. Delph. *ἑβδεμήκοντα*; Hom. *ἑβδόμ-ατο-ς* like *πρῶτο-ς* (**πρωϝ-ατο-ς*) and *τρίτ-ατο-ς*, see § 167 p. 9. The history of *ἕβδομο-* is obscure. There seem to have once been two parallel forms, **ἑβδμο-* = O.C.Sl. *sedmo-* and **ἑπταμο-* = Skr. *saptamá-*; more we cannot say with certainty. Cp. § 178 for *ἑβδομήκοντα*, and the Author, Morph. Unt. V 36 ff.

Lat. *septimu-s.*

O.Ir. *sechtmad* Mid.Cymr. *seithuet* for **septm̥m-eto-s*, see II § 72 p. 168.

O.H.G. *sibunto.*

Pruss. *septma-s sepma-s.* Lith. *sẽkma-s (sèkma-s)*, see I § 345 p. 271, § 377 p. 286; the ordinary word now is *septiñta-s* (Lett. *septítáis*) instead of **septim̃-ta-s* through assimilation to *deviñ-ta-s.* O.C.Sl. *sedmŭ.*

§ **172.** Eight. Idg. **ok̂tṓ *ok̂tṓu̯.* *-t-* must have been something of the nature of a suffix, as *aśī-tí-ṣ* 'eighty' seems to shew; this word is unintelligible if regarded as a derivative from **ok̂tṓu̯ (aṣṭāú).*

Remark. It can hardly be a mere coincidence that the ending agrees with that of the nom. acc. du. masc. of *o*-stems (§ 285). **ok̂ī* too, which we see in *aśī-tí-ṣ*, may have been a dual, like **oqī* 'the two eyes' (§ 295). Perhaps the meaning may have been 'two sets of four' (cp. Mid.Cymr. *deu-naw* 'eighteen', properly 'two nines', etc.) It must be admitted that in that case the numeral 'two' might have been expected before **oktōu̯*, as in Lat. *vī-gintī* 'two tens', *du-centī*, and so forth. Still this might have been dropped in course of time.

Uninflected in pr. Idg.: e. g. Avest. *ašta satāiš* 'with eight hundred'; and Gr. *ὀκτώ*, Lat. *octō*, O.Ir. *ocht n-* are always

indeclinable. Inflected forms are: Skr. instr. *aṣṭā-bhíš*, Armen. *uť-i-ç*, O.H.G. dat. *ahtow-en* (only used when the substantive precedes). Inflexion is regular only in Lithuanian, *asztůnì*.

Skr. *aṣṭā́ aṣṭāú*, Avest. *ašta*. In Skr. we find also *aṣṭá*, loc. *aṣṭá-su* etc., an ad-formate of *saptá*. Compounds with *aṣṭa-* (cp. Lat. *octi-*) had not a little to do with giving currency to this form.

Armen. *uť*, for **uvť*, and that for **optō(u̯)*, whose *p* came from the numeral seven (cp. El. *ὀπτώ*); see Bugge, Beitr. zur etym. Erl. der arm. Spr. 43.

Gr. *ὀκτώ*. The numeral seven gave its rough breathing to Heracl. *ὁκτώ*, its *π* to El. *ὀπτώ*, and its *α* to *ὀκτα-* in *ὀκτα-κόσιοι* (Lesb. *ὀκτω-κόσιοι*) *ὀκτά-ποις* (beside *ὀκτώ-ποις* : Skr. *aṣṭá-pad-*). Boeot. *ὀκτό* is like *δύο*, see §§ 166, 293.

Lat. *octō*. In composition *octō-* and *octi- octu-*, cp. Skr. *aṣṭa-* Avest. *ašta-*. Osc. Úhtavis 'Octavius'.

O.Ir. *ocht n-* (see I § 517 p. 377) follows *secht n-*; for forms without the nasal see Stokes, Bezzenb. Beitr. XI 170. Mod.Cymr. *wyth* Mod.Bret. *eiz* for **oktī*, older **oktū *oktō*.

Goth. *ahtáu*; O.H.G. *ahto*, inflected dative *ahtowen*. See I § 659. 3 p. 512, § 660. 3 p. 515, § 661. 3 p. 519.

Lith. *asztů-n-ì*, cp. § 171 p. 18.

O.C.Sl. *osmĭ* (ordinal *osmŭ*) follows *sedmĭ*, see § 171 p. 18. The original Idg. abstract numeral is represented by Skr. *aśī-tí-š* ('eighty'), cp. p. 19.

Eighth. Idg. **oktōu̯-ó-* or some such form. The *mo-*forms follow the example of the numeral seven, as do Skr. *navamá-s* Umbr. nuvime (§ 173 p. 22).

Skr. *aṣṭamá-s*, Avest. *aštema-*.

Armen. *uť-er-ord*.

Gr. *ὄγδοο-ς* for **ὄγδοϝο-ς* (in Homer also *ὀγδό-ατο-ς*, like *ἑβδόμ-ατο-ς*), cp. *ὀγδο-ήκοντα, ὀγδο-άς*. *-γδ-* for *-κτ-* follows the *-βδ-* of 'seven'. In all other points the history of *ὄγδο(ϝ)ο-ς* is obscure; see the Author, Morph. Unt. V 36 ff., and below § 311.

Lat. *octāv-o-s*, Osc. Úhtavis 'Octavius'; the *ā* is strange nor has it been satisfactorily explained even by the attempts

of Thurneysen and Meringer (Kuhn's Ztschr. XXVIII 154, 232). Cp. the vulgar Latin *octuā-gintā*, for **octov-ā-*, which is like Gr. *ὀγδο(ϝ)-η-*. See the Author, *loc. cit.*

O.Ir. *ocht-mad*, Mid. Cymr. *wyth-uet.*

Goth. *ahtu-da*, O.H.G. *ahto-do*; O.Fris. *ahtunda* following *sigunda niugunda.*

Lith. *ãszma-s* (now growing obsolete), Pruss. acc. *asma-n*, O.C.Sl. *osmŭ*, pr. Balto-Slav. **oš(t)-mo-s.* The Lith. has another word *asztuñta-s*, an ad-formate of *septiñta-s deviñta-s.*

§ 173. Nine. Idg. **néu̯n̥* and **énu̯n̥*, the latter in Armenian and Greek. Also **enu̯en-*, which is preserved in Gr. *ἐνεν-ήκοντα* (§ 178). The final was *-n̥ -n*, not *-m̥ -m*, as we see from Gr. *ἐνεν-ή-κοντα*, Lat. *nōn-ā-gintā nōn-u-s* and Lith. *deviñ-ta-s* (contrast *desziñ-ta-s* 'tenth').

In Indo-Germanic, it was not inflected; e. g. Avest. *nava satāiš* 'with nine hundred'; and in Greek, Latin, and Old Irish it is always indeclinable. Inflected forms: Skr. gen. *navānā́m*, Goth. gen. *niun-ē*, O.H.G. dat. *niun-in* (only when the substantive precedes). It is always declined in Lithuanian, *devyn-ì.*

Skr. *nā́va*, Avest. *nava.*

Armen. *inn*, pl. *inun-k'* or *innun-k'* (cp. Osthoff, Morph. Unt. I 122), see I § 232 p. 197.

Gr. **ἐνϝα* preserved in Ion. *εἰνά-νυχες εἴνα-κόσιοι εἴνα-τος* Att. *ἐνα-κόσιοι ἔνα-τος*, Hom. *ἐνν-ῆμαρ* like *ἐννή-κοντα* (§ 178). Also *ἐννέα*, which should probably be explained with Wackernagel (Kuhn's Ztschr. XXVIII 132 ff.) as **ἐν νεϝα* 'nine in all, a good nine', this original meaning having been subsequently weakened; Heracl. *ἑννέα*, like *ὀκτώ*, following *ἑπτά*. *ἐνεν-ή-κοντα* 'ninety' preserves an original **enu̯en-*, cp. § 178.

Lat. *novem* instead of **noven* follows *septem decem.* *-n* is kept in *nōn-ā-ginta nōn-u-s. noun-dinu-m nōn-dinu-m*, usually *nūn-dinu-m.* Umbr. nuvis 'novies'.

O.Ir. *nōi n-*, Mod.Cymr. Corn. *naw.* But whence came this *a*?

Goth. O.H.G. *niun* for **niu̯un*, I § 179 p. 156. O.Sax. *nigun* A.S. *niȝon*, where ȝ is a transition-sound or glide (cp. Jellinek, Paul-Braune's Beitr. XIV 582). The ending *-un* is

to be explained in the same way as that of *sibun*, for which see § 171 p. 18.

Lith. *devyn-ì* O.C.Sl. *devętĭ* instead of **navynì *novętĭ* on the analogy of the initial *de-* of 'ten'; Pruss. *newīnts* ('ninth') has been influenced by the Germanic form. For the termination of *devyn-ì* see § 171 p. 18. *devętĭ* is the Idg. abstract **neu̯n̥-ti-s* : cp. Skr. *navatí-š* ('ninety'), Avest. *navaiti-š* ('nine' and 'ninety'), O.Icel. *nīund*.

Ninth. Idg. **neu̯n̥n-ó-* or **neu̯n̥-tó-* (**enu̯n̥n-ó-* or **enu̯n̥-tó-*), perhaps both.

Skr. *navamá-s* Avest. *naoma-* = **navema-* (as *ker^enaom* = **ker^enavem*, I § 158 p. 141) O.Pers. *navama-* instead of **navaná-*, following (Skr.) *saptamá- dašamá-*, cp. Umbr. nuvime.

Armen. *inn-er-ord*.

Gr. Hom. *εἵνα-το-ς*, Att. Hom. *ἔνα-το-ς* for **ἐνϝα-το-ς*.

Lat. *nōn-u-s* for **noven-o-*. If the *dzenoine* of the Duenos inscription means 'die noni', its *oi* makes some difficulty, although not for the reasons which Pauli suggests (Altital. Stud. I 32 ff.). Umbr. nuvime 'nonum', where *m* is not original, but is like that of Lat. *novem* and Skr. *navamá-s*.

O.Ir. *nō-mad*, Mid.Cymr. *naw-uet*, re-formates like *ocht-mad wyth-uet* etc.

Goth. *niun-da* O.H.G. *niun-to-*, pr. Germ. **niu̯un-dá-n-*.

Lith. *deviñ-ta-s* (Pruss. *newīnt-s*, see above), O.C.Sl. *devę-tŭ*.

§ **174.** Ten. Idg. **dékm̥*. Originally indeclinable, and still so in Ved. *dáša kakšíyābhiš* 'with ten girdles', Gr. *δέκα ναυσί*, Lat. *decem nāvium*, Goth. *taíhun skattans*, O.H.G. *stat zehen burgo* 'Decapolis', and similar phrases. Inflected: Skr. instr. *dašá-bhiš*, Armen. instr. *tasam-bk' tasam-b*, Gr. gen. *δέκων* in a Chian inscription (a trace of Lesbian influence), dat. Goth. *taíhun-im* O.H.G. *zehin-in* (in O.H.G. only found where the substantive precedes). **dekm̥* has died out not only in Slavonic, but in Baltic too.

Skr. *dáša*, Avest. *dasa*.

Armen. *tasn*. If the acc. *mard* 'hominem' is a regular developement from **mr̥to-m*, in which case original final *-m* was

dropped, *tasn* like *evtn* must be an ad-formate of *in-n* 'nine', cp. I § 202 p. 169, § 651. 2 Rem. p. 497. But it is preferable to regard the ending of *tasn* as coming quite regularly from **dekm̥*, and *mard* as being a nominative used for the accusative (see § 212).

Gr. *δέκα*. Arcad. *δυό-δεκο* (Bullet. de corresp. hellén., IV 1889 p. 281) like *δέκοτο-ς* (see p. 24).

Lat. *decem*. *-decim* in *ūn-decim* etc. is due to the accentuation, see I § 65 p. 53. Re-formates are *decu-plu-s dec-enni-s dec--unx* etc. beside *decem-plex* etc. Umbr. *desen-duf* 'duodecim' tekuries *dequrier* 'decuriis', Osc. dekmanniúís 'decumanis'.

O.Ir. *deich n-* (indeclinable, since *deich* and *dech* are meaningless variations in the mode of writing the same sounds), O.Cymr. *dec*.

Goth. *taíhun* O.H.G. *zehan*. The final *-n* must be explained in the same way as that of *sibun*, see § 171 p. 18. We should not have expected the *-a-* which is found in O.H.G. *zehan* O.Sax. *tehan*; cp. O.H.G. *zehanzo* beside Goth. *taíhuntē(-hund)* § 179. Possibly in words like *drī-zehan*, **-tehun* became **-tehn̥* and then *-tehan*, and the *a* passed thence into **téhun* etc. (cp. O.H.G. *Sígi-frid* as contrasted with *fridu*). A different explanation is given by Noreen, Arkiv III 26.

In Balto-Slavonic the only forms left are the two Idg. abstracts: Lith. *deszim-t-* O.C.Sl. *desę-t-* and Lith. *deszim-ti-* O.C.Sl. *desę-tĭ-*: cp. Skr. *daśát-* Gr. *δεκάς* Goth. gen. pl. *taíhuntē* (in *taíhuntē-hund* '100', see § 179) and Skr. *daśatí-ṣ* ('tenfold character, group of ten', specialised to mean 'group of ten tens, hundred') O.Icel. *tīund*. In early Lithuanian *deszimti-* is still an inflected singular substantive and is followed by the genitive; but now the inflexion is gone, and we have *dẽszimt* (doubtless both acc. sing. = *desętĭ* and loc. sing. = *desęte*) and *dẽszimts desziĩnts* (doubtless nom. pl. = *desęte*)[1]), although still

1) The history of the plural form *dẽszimts* needs further investigation. Has it been influenced by *dvìdeszimts* 'twenty' *trìsdeszimts* 'thirty' etc.? Or is it merely due to an idiom of the language which we find in the old books, whereby the abstract noun is used like an adjective with the

governing the genitive plural. O.C.Sl. *desętĭ* is declined throughout as an *i*-stem; there is a parallel stem *desęt-*, e. g. in *jedinŭ na desęte* (loc. sing.) 'eleven' = 'one upon ten'.

Tenth. Idg. **dek̂m̥-to-* (**dek̂m̥-t-o-*? see II § 81 Rem. 1 p. 242) and **dekm̥m-o-*.

Skr. *daśamá-s*, Avest. *dasema-*.

Armen. *tasn-er-ord*.

Gr. *δέκατο-ς*. Lesb. Arcad. *δέκοτο-ς* (cp. Arcad. *δυό-δεκο*), whose *ο* follows *-κοντα -κοστο-ς*, cp. §§ 176, 177.

Lat. *decimu-s*, Osc. dekmanniúís 'decumanis'.

O.Ir. *dechm-ad*, Mid.Cymr. *decu-et*.

Goth. *taíhunda*, O.H.G. *zehanto* (cp. p. 23).

Lith. *deszim̃ta-s*, O.C.Sl. *desętŭ*.

§ **175.** Eleven to Nineteen. When the units were added to multiples of ten in the parent language, both units and tens of the resulting number were independent in the sentence. The copula 'and' may have been generally used with them, as in the phrases Ved. *ḗką ca vi̯śatí̯ ca* acc. '21', *tráyaś ca tri̯śác ca* '33', Gr. *δύω καὶ πεντήκοντα* '52', Lat. *quattuor et vīgintī*; but not always, as we infer from Ved. *tri̯śátą trī́n* acc. '33', Gr. *πεντήκοντα δύο*, Lat. *vīgintī quattuor* etc. But in the cardinal numbers 11 to 19 there was a closer combination between the unit and the numeral 'ten' which followed it (see II § 16 pp. 31 f.). In the numbers 11 to 14 the unit was inflected, in 15 to 19 it was not; hence 15 to 19 readily became true compounds, whilst 11 to 14 may not have become compounds so soon, since their ending had first to become stereotyped.

Remark. There can be no doubt as to the reasons for this difference between the expressions for 11 to 19 and those for 21—29, 31—39 etc. The former group was more often used, for one thing; but the chief reason was that the words for 20 and the other multiples of ten were themselves compounds, and therefore it was less convenient to compound them again with other words.

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name of the thing whose number is stated, and takes the case of it; as loc. *deszimtisa mëstosu* 'in decem urbibus' (cp. Bezzenberger, Beitr. zur Gesch. der lit. Spr. 178 f.)?

But the numbers 11 to 19 were not expressed in the parent language only by pairs of words in juxta-position, like Skr. *dvá--daśa* Gr. *δώ-δεκα*. We are justified in regarding as original expressions like Gr. *δέκα δύο, δέκα τρεῖς*, Lat. *decem duo, decem trēs*. We may also believe that phrases of subtraction were used for the numbers immediately preceding twenty as well as for those immediately preceding thirty, forty and so forth; such, for example, as we find when the languages had begun to follow their own separate lines — Skr. *ēkōnaviṅśati-ṣ*, *ūnaviṅśati-ṣ* and *ēkān ná viṅśatí-ṣ* for 19, *tryūnaṣaṣṭi-ṣ* for 57, Gr. *ἑνὸς δέοντα εἴκοσιν ἔτη* '19 years', *μιᾶς δέουσαι τετταράκοντα νῆες* '39 ships', Lat. *ūn-dē-vīgintī duo-dē-trīgintā*, A.S. *twā lǣs twentiȝ* for 18, *ān lǣs twentiȝ* for 19, H.G. dial. *ains-min-zwainzich zwai-min-dreisich* (Goth. 2 Cor. 11. 24 *fidvōr tiguns áinamma vanans* to translate *τεσσαράκοντα παρὰ μίαν*).

Of the different modes of expressing the ordinals which we find, the Latin for 13th to 19th, *tertius decimus* etc., occurs in Armenian, Greek, and Germanic besides. We may therefore fairly regard this as original.

Aryan. Cardinals. 11 Skr. *ēkā-daśa*; the first part of which crystallises the form of the instr. sing. masc. (Ved.) and nom. sing. fem.; the form thus chosen was suggested by *dvā--daśa*, cp. Avest. *aęvan-dasa-* etc. '11th' below. 12 Skr. *dvā--daśa duvā-daśa* Avest. *dva-dasa*. 13 Skr. *tráyō-daśa*. 14 Skr. *cátur-daśa*, showing now the stem without inflexion, cp. Avest. *caþru-dasa-* '14th'. 15 Skr. *páñca-daśa*, Avest. *panca--dasa*. 16 Skr. *ṣṓ-ḍaśa*. 17 Skr. *saptá-daśa*. 18 Skr. *aṣṭá--daśa*. 19 Skr. *náva-daśa*, also *ēkōnaviṅśati-ṣ* (*ēka-ūna-viṅśati-* 'a score too little by one, a score less one'), or simply *ūna--viṅśati-ṣ*, and *ēkān* (i. e. *ēkād*) *ná viṅśatí-ṣ* (cp. Delb., Altind. Synt. pp. 112, 543).

Ordinals. In Sanskrit all the numbers have both *-daśá-s* and *-daśama-s*, cp. Lat. *-decimu-s*. 11th Skr. *ēkādaśá-s*, Avest. *aęvan-dasa-*, *aęva-dasa-*, *aęvō-dasa-*; *aęva-dasa-* may be like *dva-dasa-* = Skr. *dvā-daśá-*, or is it the bare stem instead of a case, as in *þri-dasa- caþru-dasa-*? cp. II § 25 p. 41.

12th Skr. *dvādaśá-s* (*dvādaśama-s* like *duodecimu-s*), Avest. *dvadasa-*. 13th Skr. *trayōdaśá-s*, Avest. *þridasa-* with the bare stem instead of a case. 14th Skr. *caturdaśá-s*, Avest. *caþrudasa-*, cp. the cardinal. 15th Skr. *pañcadaśá-s*, Avest. *pancadasa-* and *pancadasya-*, the latter like *tūirya-* 'fourth' *bitya-* 'second'. 16th Skr. *ṣōḍaśá-s*, Avest. *xšvašdasa-*, etc. Side by side with Skr. *navadaśá-s* (Avest. *navadasa-*) '19th' is found *ēkōnaviṃśa-s*, *ūnaviṃśa-s* and *ēkānnaviṃśá-s*, cp. the ordinal.

Armenian. Ordinals. 11 *me-tasan*. 12 *erko-tasan*. 13 *erek̆-tasan*. 14 *čorek̆-tasan*. 15 *hnge-tasan*. 16 *veš-tasan*. These are all inflected as *i*-stems; e. g. gen. dat. *metasaniç*, instr. *metasanivk̆* (cp. *k̆san* '20', gen. dat. *k̆saniç*). The numbers from 17 onwards have *ev* 'and', and inflect sometimes both parts, sometimes only *tasn* (cp. *air-ev-ji* II § 28 p. 46). 17 *evt̆n-ev--tasn*. 18 *ut̆-ev-tasn*. 19 *inn-ev-tasn*.

Ordinals. Two modes are used. *tasn-erord* ('tenth') may be followed by the ordinal of the unit, as *tasnerord čorrord* 'decimus quartus'; or *-er-ord* may be simply added to the cardinal, as *metasan-erord* '11th' *čorek̆tasan-erord* '14th'.

Greek. Cardinals. 11 *ἕν-δεκα* (*ἑν-* is nom. acc. neut.), Delph. *δέκα εἷς*. 12 *δώ-δεκα* (Hom. *δυώ-δεκα*), Hom. *δυο-καί-δεκα*, and in Att. and Dor. *δέκα δύο* as well. 13 *τρεῖς καὶ δέκα* and (with the nom. *τρεῖς* crystallised) *τρεις-καί-δεκα*[1]), Att. Dor. *δέκα τρεῖς* as well. 14 *τέτταρες καὶ δέκα*, *τετταρεσ-καί-δεκα* and *δέκα τέτταρες*, and so forth. As to the form of *ἕξ* in *ἑκ-καί-δεκα* beside Boeot. *ἐσ-κη-δέκατος* see the Author's Greek Grammar[2] § 59 p. 71. In Attic *δέκα δύο*, *δέκα τρεῖς* etc. were used when the substantive preceded; e. g. *δραχμαὶ δέκα τρεῖς* but *τρεῖς καὶ δέκα δραχμαί* (cp. Wackernagel, Kuhn's Ztschr. XXV pp. 284 f. and Philol. Anzeiger 1886 pp. 78 f.; Meisterhans, Gr. der att. Inschr.[2] pp. 126 f.).

Ordinals. 11th *ἑνδέκατο-ς*. 12th *δωδέκατο-ς*, epic *δυωδέκατο-ς*,

1) If the by-form *τρισκαίδεκα* is to be admitted (cp. Meisterhans, Gr. der att. Inschr.[2] p. 126), it contains the acc. *τρῖς* = **τρινς* (Wheeler, Der gr. Nominalaccent 42) in a crystallised shape, or *τρῖς*, the form it assumed in proethnic Greek before consonants (I § 204 p. 171).

Ion. *δυοδέκατο-ς*. From 13th onwards the usual mode of expression in classical Attic, followed consistently in the inscriptions, is *τρίτος καὶ δέκατος, τέταρτος καὶ δέκατος* etc. Homer has *τρεισκαιδέκατο-ς ὀκτωκαιδέκατο-ς*, and Herodotus *τεσσαρεσκαιδέκατο-ς πεντεκαιδέκατο-ς*, while we find *ἑσκηδέκατο-ς* in Boeotian.

Italic. Cardinals. The following is the ordinary Latin mode of expressing these. 11 *ūn-decim*, the first part of which we may conjecture to have come from more than one case-form (cp. *ūn-dē-vīgintī*), cp. I § 633 p. 474, II § 36 p. 62. 12 *duo-decim*. 13 *trēdecim* for **trēz-decim* (I § 594 p. 450); also *trĕdecim*, perhaps following *trĕcentī*. 14 *quattuor-decim*. 15 *quindecim* for **quinqu(e)-decim*, see I § 633 p. 474. 16 *sē-decim* for **segz-decim*, see I § 594 p. 450. 17 *septen-decim*, see I § 207 p. 174. 18 *duo-dē-vīgintī*. 19 *ūn-dē-vīgintī*, cp. *ūn--decim*. Other expressions are interchanged with these, such as *trēs et decem*, *octō et decem*; *decem duo, decem novem*; *decem et ūnus, decem et duo*.

Umbr. *desen-duf* acc. 'decem duo', see I § 207 p. 174.

Lat. Ordinals. 11th *ūndecimu-s*. 12th *duodecimu-s*. 13th *tertius decimus*, 14th *quartus decimus* etc., rarely *decimus tertius* etc. 18th *duodēvīcēsimu-s*, rarely *octāvos decimus*. 19th. *ūndēvī-cēsimus*, rarely *nōnus decimus*.

Old Irish. In the cardinals we have the form *deac*, dissyllabic in the older language, in the later contracted into *dēc* (Mod.Ir. *déag*). 11 *oen — deać*, 12 *dā — deac*, 13 *trī — deac* etc., with the noun in between, as *dā cath deac* '12 battles'. *deac dēc* has nothing to do with *deich n-*; it was possibly a word meaning much the same as Skr. *adhika-* Goth. *-lif* Lith. *-lika*.

Ordinals. 11th *oenmad — deac*, 12th *aile — deac* etc.

Germanic. Cardinals. 11 and 12 contain *-libi-*. This is a noun stem connected with Goth. *bi-leiban* 'to remain' (√ *leip-*, Skr. *limpámi* 'I cleave, stick'), and it originally meant 'excess' or 'being inexcess' — *elf* would then be 'one in addition', i. e. to ten; cp. below Lith. *-lika* from √ *leiq-*, and Skr. *adhika-* 'being

in excess' as used where 10 and its multiples are coupled with units, e. g. *aṣṭādhikanavati-ṣ* 'a ninety increased by eight' = '98'. Goth. *áin-lif* O.H.G. *ein-lif*, Goth. *tva-lif* O.H.G. *zwe-lif* appear inflected under the same conditions and in the same way as the numbers 4 to 10, e. g. *tvalibi-m, zwelifin* (O.Sax. *elleban* '11' nom., following *tehan* '12'). 13 O.H.G. *drī-zehan*, but also *fone dien anderen drin zēnin* (Graff, Ahd. Spr. V 628). 14 Goth. *fidvōr--taíhun*, O.H.G. *fior-zehan*. 15 Goth. *fimf-taíhun* O.H.G. *finf--zehan*. 16 O.H.G. *sehs-zehan*. 18 O.H.G. *ahto-zehan*. 19 O.H.G. *niun-zehan*.

Ordinals. 11th (fem.) O.H.G. *einlif-to* O.Icel. *ellifte ellifti*. 12th (fem.) O.H.G. *zwelif-to* O.Icel. *tolfte tolfti*. The following ordinals began by being phrases of the same type as Lat. *tertius decimus*; but their first member crystallised, it would seem, in proethnic Germanic, and they then conformed to the rules of stem-compounds. Goth. Luke 3. 1 *in jēra fimftataíhundin* 'ἐν ἔτει πεντεκαιδεκάτῳ'. O.H.G. *dritto-zehanto*, *fiordo--zehanto* etc., and also with *-a-* (later *-e-*) as the final of the first member. Another series, derived from the cardinal, was used in later O.H.G., as *fierzēn-do sehszēn-do*. Icelandic has a corresponding series, *fim(m)tān-de sextān-de* etc.

Balto-Slavonic. Lithuanian. 11 *vėnů-lika*, 12 *dvý--lika*, 13 *trý-lika*, 14 *keturió-lika*, 15 *penkió-lika*, 16 *szeszió-lika*, 17 *septynió-lika*, 18 *asztůnió-lika*, 19 *devynió-lika*; 11th O.Lith. *lëka-s*, 12th O.Lith. *antras lëkas*, but the words now used have *-likta-s*, as 11th *vėnů́likta-s*, 12th *dvýlikta-s*. *trý-lika*, *keturió--lika* etc. contain forms of the neut. pl. in both parts (§ 338), and accordingly O.Lith. has the dat. *-likams* and instr. *-likais*. When the neuter dropped out of use in Lithuanian (§ 403), *-lika* was treated as a nom. sing. fem.; and then it was declined gen. *-likos* etc. This inflexion is seen in Old Lithuanian, and is still found in dialects of the language. *-lika* came from an adjective **lika-s* 'remaining over, being in excess', a by-form of the O.Lith. *lëka-s* just mentioned; and to this day *lēka-s* is in regular use in the sense of 'remaining over singly, odd'. The root is *leiq-* (Lat. *linquo* Gr. λείπω). Cp. Goth. *áin-lif* above. In

vënů'-lika and *dvý-lika* the final of the first member has assimilated itself to the numerals immediately following, and become long; cp. Skr. *ḗkā-daśa* p. 25 and § 326. Cp. Bezzenberger, Beitr. zur Gesch. der lit. Spr. 179 ff.; Kurschat, Gram. p. 269; the Author, Lit. Volkslieder p. 309, and in Techmer's Internat. Ztschr. I 251 f.; Mahlow, Die langen Vocale 49; Joh. Schmidt, Pluralbild. 39, 42. — Slavonic. 11 *jedinŭ na desęte* (loc. sing. of stem *desęt-*) = 'one upon ten', 12 *dŭva na desęte* 'two upon ten' etc. Cp. Lett. *wîn-pa-dsmit* '11' = 'one over ten' *diw-pa-dsmit* '12' etc., and Gr. Thess. *τᾶ ἕκτα ἐπ' ἰκάδι* (Collitz, Samml. der Gr. Dialektinschr., no. 345. 10). There are two types of ordinals. Sometimes only the unit takes the ordinal form, as *osmyjĭ na desęte* 'the eighth upon ten' = 18th; sometimes *-ĭnŭ* was used to make a derivative from the expression for the cardinal number. In the latter case the unit might either show the form of the nom. acc., as *pętĭ-na-desętĭnŭ* '15th'; or be treated like the first member of a stem-compound, as *pęto-na-desętĭnŭ*, cp. II § 47 p. 86.

§ **176.** Twenty to Ninety-nine.

The Indo-Germanic expressions for multiples of ten from 20 to 90 at first meant two, three, or the proper number of tens. Originally both parts of the phrase were inflected; both the unit (except the uninflected units 5 to 9, see §§ 169 ff.) and the word for a ten — a neuter **k̂omt- *k̂m̥t-* (for **dk̂omt- *dk̂m̥t-*, see § 164 pp. 2 f.). '20' was a dual, **u̯ī* (?) *k̂m̥t-i*; the others plural, as '30' **trī k̂omt-ə*. But these expressions for multiples of ten are not inflected in any language; in all of them the nom. acc. has become stereotyped. Some at least of the units in these phrases were stereotyped in the parent language itself. This is proved by **qetu̯r̥̄-k̂omtə* (Gr. *τετρώ-κοντα* Lat. *quadrā-gintā* Avest. *caþwar*^{e}*-sat-* Armen. *k̑ar-a-sun*) and **peɵqē-k̂omtə* (Gr. *πεντή-κοντα* Skr. *pañcā-śát-*), which were ad-formates of **trī-k̂omtə*. It is doubtful whether **k̂m̥ti* and **k̂omtə* had also become crystallised so soon.

These forms of the nom. acc. pl. (du.) neut. became in the Indo-Germanic period the foundation upon which were built singular abstract nouns (collectives) of the feminine gender, and

ordinals whose first member was the nom.-acc. form. The abstract nouns were ad-formates of the feminine **dekm̥t-* 'group of ten'[1]): examples are Skr. *tri̯-śát-* 'group of 30', Gr. Boeot. *ϝικάς* Att. *εἰκάς*, O.Ir. *fiche* 'group of 20' gen. *fichet*. The ordinals were derived from these by the suffixes *-to-* and *-t-m̥mo-*. When these two groups of abstract nouns and ordinals sprang up, the expressions for the cardinal numerals, from which they were derived, had not yet fully become compounds. Thus **trīkomt- *trīkm̥t-* '*τριακάς*' and **trīkm̥t^s^to- *trīkm̥t^s^tm̥mo-* '*τριακοστός*' may have stood related to **trī komtə* 'three tens' much in the same way as O.C.Sl. *dŭvadesętĭnŭ* '20th' to *dŭva desęti* '20', and as Lat. *quartadecumānī* to *quarta decuma*, *Sacraviēnsēs* to *sacra via* etc. (II § 3 p. 5).

Remark 1. Perhaps the re-formates **qetu̯r̥-* and **penqē-* first appeared only in collectives and ordinals, in which there was a closer connexion between the word for the unit and the word for the ten. This might explain certain pairs of forms, *τετρώ-κοντα* and *τετταρά-κοντα* in Greek, *pancā-sat-* and *panca-sat-* in Avestic; and the difference between Avest. *caϑwar^e^-sat-* and Skr. *catvāri̯-śát-*. Gr. *τετρώκοντα* would then be an ad-formate of *τετρωκοστό-ς*; while *τετταρακοστός*, on the contrary, would have followed *τετταράκοντα*.

The dual **km̥t-i* once had the weak stem in all its cases; hence come Avest. *vī-saiti* Armen. *k-san* Gr. *ϝί-κατι* Lat. *vī-gintī*, hence also the collective with *-km̥t-* : Gr. *ϝι-κάς εἰ-κάς* O.Ir. *fi-che* (O.Cymr. *u-ceint* Corn. *u-gans*). But the nom. acc. pl. was **komt-ə*, whence Armen. *-sun* Gr. *-κοντα* and the collectives Avest. *ϑri-sąs* O.Ir. *-cha -ga*. In cardinals and collectives of the tens from 30 upwards **km̥t-* is also found (Lat. *-gintā* and Skr. *tri̯-śát-* Avest. *ϑri-sat-* etc., Gr. *τριᾱ-κάς*). Two possible causes may be assigned for this. (1) Beside **komt-ə* there may have once been weak cases with **km̥t-*, as loc. **km̥t-su*, or (2) the corresponding forms for the number 20 may have set the type. The ordinals had all of them doubtless **km̥t-* to begin with, as Gr. Boeot. *ϝι-κασό-ς* Skr. *tri̯-śattamá-s* Lat. *trī-cēsimu-s*.

1) Words were formed later on the same principle in Old Icelandic, in Lithuanian, and in Greek. Examples: O.Icel. *tvītøg-t* '*εἰκάς*' *þrītøg-t* '*τριακάς*' etc.; Lith. *dvideszimti-s* '*εἰκάς*' (e. g. *po dvideszimtės metu*, in Bretken) from **dvì dẽszimti* '20'; Gr. *ἑνδεκάς δωδεκάς* etc.

Remark 2. Avest. *vīsąstema-* is an ad-formate of **þrisąstema-* (which we may infer from *þrisąs*), which had itself taken the place of **þrisastema-*. In Greek, and doubtless in its proethnic period, *-κοντα* influenced the connected ordinals in **-καστο-ς*. The change may have taken place in either of two different ways; (1) **-καστο-ς* may have become **-κονστο-ς* and then *-κοστο-ς* (cp. *κεστό-ς* for **κενστο-ς*, I § 204 p. 171), or (2) **-καστο-ς* may simply have taken over the *ο* of *-κοντα*. The *ο* then spread backwards to 20 and 10 (Ion. Att. *εἰκοστό-ς εἴκοσι*, Arcad. *δέκοτο-ς δυό-δεκο*), and forwards to 100 and its multiples (Arcad. *ἑκοτόν-βοια* and Ion. Att. *-κόσιοι*).

The old expressions for the cardinal numbers, consisting of an adjective with a substantive, remained in Armenian, Greek, and Latin, and in the Avestic word *vīsaiti* '20'. In Aryan and in Keltic these were displaced by the group of singular abstract nouns; the only Aryan forms which recal the old type are Avest. *vīsaiti*, and indirectly Skr. *vi̯śatí-ṣ* (see § 177). But in Aryan these forms were themselves displaced in the numbers from 60 to 90 by a second group of abstracts, such as Skr. *ṣaṣṭí-ṣ* (see § 178). In Germanic and Balto-Slavonic, both these expressions for the cardinal numerals and the singular abstracts had disappeared before the historical period begins. Their place was filled by other expressions which had really and truly the same etymological factors, and the same meaning, as the original Indo-Germanic expressions. Take for example 30, Goth. *þreis tigjus* Lith. *trỹs dẽszimtys* O.C.Sl. *tri desęti*, where the substantive was the Indo-Germanic word for a group of ten, **deḱm̥t-* **deḱm̥ti-*, still used independently.[1]) It is probable that **ḱomt-* **ḱm̥t-* became obscured quite early in Germanic and Balto-Slavonic, as in the other languages, and sank to the level of a suffix; and the new expressions served to refresh somewhat the original meaning of the words. But then the same thing happened again, and the new words

1) Germ. **teʒu-* 'group of ten' must be derived from **deḱm̥t-* in the following manner. In the instr. pl. **teʒund-mí* and in an instr. dual form containing an *m*-suffix (in the expression for 20), *-undm-* became *-unm-*, *-umm-*, and *-um-* successively. Thus we have *tigum*, which gave the type for a new set of cases, Goth. *tigjus* etc. See §§ 379, 386. What may be the relation of forms with *u* in the root-syllable (O.H.G. *-zug* O.Icel. *togr tugr*) to **teʒu-* still remains an open question. — For the masc. gender of the word compare O.C.Sl. *dŭva desęti*.

were themselves obscured and became suffixes. For example, in Mid.H.G. *drī-ʒic vier-zic* Mod.H.G. *drei-ssig vier-zig* the final part was and is a mere suffix, no less than was that of Gr. *τριᾱ́-κοντα* or that of Lat. *trī-gintā* at the beginning of the historical period of the classical languages. And in German [and English] these multiples of ten are used as adjectives agreeing in case with the substantive which follows, just as happened with the similar expressions which the Romans and the Greeks had inherited from the parent language: Mod.H.G. *in vierzig wochen* 'in forty weeks' as contrasted with O.H.G. *feorzug wehhōno* '*τετταρακοντὰς ἑβδομάδων*' and with Goth. *dagē fidvōr tiguns* '*ἡμερῶν τέτταρας δεκάδας*', just like Gr. *τριᾱ́κοντα ἄνδρες* instead of **τρία κόντα ἀνδρῶν*, Lat. *trīgintā virī* instead of **trī contā virōm*. However, in Germanic these new expressions with **teʒu-* held their ground only from 20 to 60, while the three others of the series — 70, 80, 90 — were displaced in proethnic Germanic by a new group formed on the analogy of an old expression for 100, Goth. *taíhuntē-hund* '*δεκάδων δεκάς*'. This change will be discussed in § 178.

In the parent language there never was any very close connexion between the words for the various multiples of ten and any intermediate units which might be used with them (in numbers such as 21, 22, 31 and so forth). The unit always remained an independent word. See § 175 p. 24. It was also independent in the differentiated idioms of the different languages. Sanskrit is the only noteworthy exception. Along with the old method of expresssion, Vedic itself contains feminine words like *tráyas-triṣ́at-* '33' *cátus-triṣ́at-* '34', which follow the analogy of *tráyō-daśa* '13' *cátur-daśa* '14'. Later, these compound forms became the rule; and for other numbers besides 24, 34 etc. the bare stem was used in them; e. g. *ēka--viṣ́ati-ṣ̌* '21' (but on the other hand *ēkādaśa*), *dvi-triṣ́at-* '32'. Sanskrit always shows a marked preference for compound words (see II § 21 p. 37), and this new group only followed the general lines of the language.

Words formed on the principle of subtraction have been

already discussed (§ 175 p. 25). Examples are *ēkōnatriśat-ūnatriśat-* '29', *pañcōną śatam* '95', *ékān ná śatám* '99'.

§ 177. Twenty. The cardinal ended in **-k̑m̥ti* (Avest. *vī-saiti* Gr. *ϝί-κατι*), which was nom. acc. du. neut. of the stem *-k̑m̥t-* (§ 294).

The first part was **u̯ei̯-* (Gr. Heracl. *ϝεί-κατι*[1]) *εἴ-κοσι*), **u̯i-* (O.Ir. *fi-che*), **u̯im-* or **u̯in-* (Skr. *vi̯-śatí-ṣ*), perhaps also **u̯ī-* (Avest. *vī-saiti*, Gr. *ϝί-κατι* with *ī*?, Lat. *vī-gintī*, Armen. *k̑san* for **gi-santi* or **gī-santi*). It would seem, then, that different case-forms were used; but we cannot get anything like a clear idea as to what the original method of expression was in Indo-Germanic. It seems certain that all these variations of **u̯ei̯-* meant 'two', and it is natural to connect them with two particles — (1) Skr. *ví* 'apart' *vi-ṣu- vi-ṣva-* 'on both sides, on different sides' (cp. Avest. *þri-šva-*) *vi-tará-m* 'further' Goth. *vi-þra* 'against, with- (in composition)' Lat. *vi-tr-icu-s* (II § 75 p. 191); and (2) *u* in Skr. *u-bhāú* O.C.Sl. *vŭ-torŭ* and in the nom. acc. du. Skr. *dvā-ú*. Then **u̯-i-* 'two' will be like **tr-i-* 'three' and **du̯i-* 'two' (§ 166 p. 6, § 311 Rem. 2). See the Author, Morph. Unt. V 23 ff., Bartholomae Stud. zur idg. Sprachgesch. I 74, and below §§ 285, 296.

The abstract ended in **-k̑m̥t-s* (in the nom. sing.): Gr. *ϝι-κάς ἰ-κάς εἰ-κάς* O.Ir. *fi-che*. The ordinal ended in **-k̑m̥t^s^to-* **-k̑m̥t^s^tm̥mo-*: Gr. Boeot. *ϝι-καστό-ς* Lat. *vī-cēsimu-s*.

Aryan. Avest. *vīsaiti*. Skr. *viṣati-ṣ* is a singular abstract noun formed from the nom. acc. du. in **-śati*, after the analogy of *ṣaṣṭí-ṣ* '60', *saptatí-ṣ* '70' etc.: people said *viṣatyā́ hárīṇām*, and with the case of the latter word assimilated *viṣatyā́ háribhiṣ* 'with 20 bay steeds' just as they said *ṣaṣṭyā́ hárīṇām* and *ṣaṣṭyā́ háribhiṣ* 'with 60 bay steeds'. The later *viṣat-* seems to be merely an ad-formate of the numbers 30 to 50 *triṣát-* etc.,

1) Danielsson (Epigraphica, Upsala 1890, p. 33) would now regard Heracl. *ϝείκατι* as *ϝίκατι* influenced by the form of Att. *εἴκοσι*, which he takes to stand for *ἐϝίκοσι*. The diphthong of *ϝει-* has no real support whatever in the other Indo-Germanic languages; still I can see no valid reason for denying that it represents an original proethnic form.

as on the other hand *vi̯śati-ṣ* was the type for *tri̯śati-ṣ* which was used in more recent times along with *tri̯-śát-*. Avest. *vī-* may come from *vi̯-*; see the Author, Morph. Unt. V 27.

20th. Avest. *vīsąstema-* instead of **vīsastema-*, see § 176 Rem. 2. Skr. *vi̯śati-tamá-s*, derived from *vi̯śatí-* (cp. *ṣaṣṭi-tamá-s* § 178), and *vi̯śá-s* like *ēkādaśá-s* 'eleventh' etc.

Armenian. *k̆san* probably for **gsan *gĭsan(ti)* with *g-* = *u̯-*, *-s-* = *-k̆-*, *-an-* = *-m̥-*, see I § 232 p. 197. *k̆san*, like the multiples of ten that followed it, received inflexion once more (as an *i*-stem), e. g. gen. dat. *k̆san-i-ç*; and later it was also declined in the singular. Ordinal *k̆san-erord*.

Greek. Dor. Boeot. *ϝίκατι*, and with *ει* Dor. *ϝείκατι* Ion. Att. *εἴκοσι* Hom. *ἐείκοσι*. 20th Boeot. *ϝικαστό-ς* Att. *εἰκοστός*. Abstract: Boeot. *ϝικάς* Thess. *ἰκάς* Att. *εἰκάς*. The quantity of *ι* in the first syllable has not been ascertained. *-ο-* in place of *-α-* was due to the following multiples of ten, its first source being the ending *-κοντα*; see § 176 Rem. 2 p. 31. Hesychius has preserved another form *ἴκαντιν* (MS. *ἰκάντιν*) with the *-ν-* of *-κοντα*. The *ν ἐφελκυστικόν* may have been first added to *εἴκοσι* when it was used as a dative, cp. inscr. *ἀνδρᾶσιν ἑνὶ καὶ εἴκοσιν* (Maassen, De littera *ν* paragogica, 1881, p. 34).

Italic. *vī-gintī*. *vīcēsimu-s*, rarely *vīgēsimu-s*. Whether *vī-* represents Idg. **u̯ī-* or **u̯ei̯-* is uncertain; we find *veiginti* in *C.I.L.* I 1194, later than 105 B.C. It is also doubtful why the final *-ī* of *-gintī* is long; was an original *-i* lengthened on the analogy of *-ā* in *trīgintā* etc., or was *-oi̯* or *-ei̯*, the ending of the nom. acc. du. neut. of *o*-stems (see § 293), substituted for it? The *-g-* Thurneysen holds to be correct phonetically in *septingentī nōngentī (quadringentī octingentī)*, and then to have extended itself by analogy into other numbers (I § 499 p. 366); in considering this question, we must not forget that a media *ĝ* seems also to be indicated by the *z-* of Alban. *-zet* 'group of 20' (*ńs-zét* 'one score', *dü-zét* 'two score' etc.) — see G. Meyer, Abh. zu M. Hertz' 70. Geburtstag 1888, pp. 90 f., and compare the mediae in Lat. *quadru-* § 168 p. 11, Gr. *ἕβδομο-ς* O.C.Sl. *sedmŭ* § 171 p. 19.

Old Irish. *fi-che* (gen. *fichet* dat. *fichit*) for **-k̑m̥t-s* (I § 243 p. 201, § 620 p. 467, § 634 pp. 474 f., § 657. 6 p. 509, § 685 p. 552); possibly *fi-* took the place of **u̯ī-* or **u̯eḭ-* after the analogy of *tricha*. O.Cymr. *u-ceint* Corn. *u-gans*, the *u* of which has not been explained; cp. Thurneysen in Kuhn's Ztschr. XXVI 310 footnote 2. 20th Mid.Ir. *fichet-mad* (inferred from *cōicet-mad*).

Germanic. Goth. *tváitigjus*, dat. *tváimtigum*. O.H.G. *zwein-zug* O.Sax. *twēn-tig*, the first part being a crystallised dative. 20th O.H.G. *zweinzug-ōsto*. As to **tezu-* for **dek̑m̥t-* see p. 31 footnote 1.

Balto-Slavonic. Lith. originally **dvì dẽszimti* (dual), hence *dvìdeszimt* uninflected, and also a dialectic form *dvìdeszimts* through assimilation to *trìsdeszimts* etc.; 20th O.Lith. *antra-s deszimta-s*, modern *dvìdeszimta-s*. O.C.Sl. *dŭva desęti* (dual, so *desętĭ* is masc.); 20th *dŭvadesętĭnŭ dvadesętĭnŭ*, and, following the fashion of stem-compounds, *dvodesętĭnŭ* (cp. *pęto-na-desętĭnŭ* § 175 p. 29).

§ **178.** Multiples of Ten, from Thirty to Ninety.

Aryan. Traces of the old neuter plural phrases **trī k̑omtə* etc. survive in the first components of Avest. *caþwar^{e}-sat-* and Skr. *pañcā-śát-* Avest. *pancā-sat-*, since these followed the analogy of **trī-* (see § 176 p. 29), and also in the first part of Skr. *catvāri-śát-*, in which **catvāri-* changed to *catvāri-* on the analogy of *vi-* and *tri-*. In proethnic Aryan the feminine singular abstract nouns displaced the old plural phrases, and in the same period these same forms, in the numbers from 60 to 90, were themselves displaced by abstract nouns derived from the units, Skr. *ṣaṣṭí-ṣ* Avest. *xšvašti-š* 'a group of six' (*i. e.* six tens), and so forth.

In the second member of 30, 40, and 50 the weak stem **-k̑m̥t-* = Skr. *-śat-* Avest. *-sat-* has levelled out the others; Skr. *tri-śát- catvāri-śát- pañcā-śát-*, Avest. *þri-sat- caþwar^{e}-sat- pancā-sat-*; **-k̑omt-* is found only in Avest. *þri-sąs*, an indeclinable word, which corresponds to O.Ir. nom. sing. *tri-cha* (cp. Ascoli, Krit. Stud. 100). In Avestic the acc. in *-sat-em* was

used for the nom. as well, doubtless under the influence of the neuter *sate-m* '100'; hence the word was declined as an *o*-stem, gen. pl. *þrisatanąm*, *pancāsata-gāya-* 'space of 50 paces'. In Sanskrit the analogy of *vi̯śatí-ṣ* gave rise to *tri̯śati-s*, which was used along with *tri̯śát-*.

With regard to the first member, the following are directly descended from Indo-Germanic forms: Avest. *caþwar^e-* from **qetu̯r̥-* (cp. I § 306 p. 242) and Skr. *pañcā-* Avest. *pancā-* from **pe*ə*qē-*, see § 176 p. 29. Whether Skr. *tri̯-* represents pre-Aryan **trim-*, or is an ad-formate of *vi̯-*, is a doubtful point; Skr. *catvāri̯-* instead of **catvāri-* must count as an ad-formate of this kind. Avest. *caþwar^e-sat-* was confused with compounds like *ātar^e-carana-*; hence alongside of *caþru-māhya-* adj. 'every four months, connected with four months', and the like, were coined such compounds as *caþwar^e-zaŋgra-* 'four-footed'. This same *caþwar^e-sat-* may therefore have suggested *þri-sat-* instead of **þrī-sat-* or **þri̯sat-*, and *panca-sat-* (beside *pancā--sat-*). But the *þri-* of the MSS. may be an incorrect mode of writing *þrī-* or *þri̯-* (see the Author, Morph. Unt. V 27), and *panca-sat-* may be a genuine product of the time when **pe*ə*qe k̑omtə* was still spoken and had not yet been changed to **pe*ə*qē k̑omtə* (see § 176 Rem. 1).

60 Skr. *ṣaṣṭí-ṣ* Avest. *xšvašti-š*. 70 Skr. *saptatí-ṣ* Avest. *haptāiti-š* — the *ā* of the latter is due to that of *aštāiti-*; *a* is retained in *haptaiþi-vant-* 'seventy-fold'. 80 Skr. *aśītí-ṣ* (cp. § 172 Rem. p. 19), Avest. *aštāiti-š*. 90 Skr. *navatí-ṣ* Avest. *navaiti-š*. Skr. *ṣaṣṭí-ṣ* and Avest. *navaiti-š* have not ceased to bear the more general sense of 'group of six', 'group of nine'.

Remark. We may assign a reason for the use of *ṣaṣṭí-ṣ* etc. in place of corresponding abstracts of the same kind as *tri̯-śát-*. Such a use suggests that in proethnic Aryan higher numbers could be expressed by a sexagesimal notation, in which the word *ṣaṣṭí-ṣ xšvašti-š* 'threescore' held the most prominent place. Even in historical times the ancient Persians had a remarkable liking for the number sixty and its multiples, as the Romans had for *sexāgintā* and *sescentī* (see Cantor, Mathemat. Beitr. zum Kulturleben der Völker, 1883, p. 361 f.) The original compound numeral for 60 was displaced by *ṣaṣṭí-ṣ* in proethnic Aryan, and corresponding expressions for the following tens established themselves later by analogy.

In the phrases Skr. *triśátā hárīṇām*, *ṣaṣṭyā́ hárīṇām* 'with 30, 60 bay steeds' the cases were assimilated, giving *triśátā háribhiṣ*, *ṣaṣṭyā́ háribhiṣ*; and a further assimilation of the first word to the number of the second produced Skr. *pañcāśadbhir vāṇāiṣ* 'with 50 arrows', the numeral being now regarded as an adjective. The Avestic *þrisatanąm bawrinąm* 'triginta fibrorum' is similar (cp. Lith. *deszimtisa mëstosu* p. 23 footnote 1, Lat. *ducentī virī* § 180). It is improbable that the latter construction is immediately connected with the original neut. pl. phrases **trī k̑omtə* 'three tens' etc.

Ordinals. Skr. *triśat-tamá-s catvāriśat-tamá-s pañcāśat--tamá-s* and *triśá-s catvāriśá-s pañcāśá-s* like *viśá-s* (§ 177 p. 33). *ṣaṣṭi-tamá-s saptati-tamá-s aśīti-tamá-s navati-tamá-s* and *ṣaṣṭá-s saptatá-s aśītá-s navatá-s* (observe that *t* distinguishes these from *ṣaṣṭhá-s* 'sixth' *saptátha-s* 'seventh', which have *th*); the last three are to be compared with *-śatá-* '100th' (§ 179). In Avestic only *þrisata-* '30th' is actually found.

Armenian. *-sun* came from the stem *-k̑omt-* (I § 79 p. 70), and is probably shortened for **-sonta*. Sometimes we have *-a-*, the 'vowel of composition', (cp. II § 28 p. 45). 30 *eresun* for **eri--a-sun*. 40 *kar-a-sun*; *kar-* probably stands for **qtu̯r̥-* (cp. *arm-ukn* 'elbow' = Skr. *īr-má-* Avest. *ar^{e}-ma-*, I § 306 p. 241). 50 *yi-sun*, cp. I § 330 Rem. p. 265, and Bugge, Beitr. zur etym. Erläut. der armen. Sprache, p. 10; whether **peəqē-* or **peəqe-* be the form contained in this word it is impossible to decide. 60 *vat-sun*, cp. *veç* 'six' and *veš-tasan* '16'. 70 *evtan-a--sun*. 80 *ut-sun*. 90 *inn-sun*. The numerals in *-sun* remained for a long time indeclinable, and afterwards, like *k̑san* '20' (§ 177 p. 34), became inflected; they were declined as *i*-stems, e. g. gen. dat. *eresn-i-ç*; later they were declined in the singular as well.

Ordinals: *eresn-erord karasn-erord* etc.

Greek. *-κοντα* was indeclinable from proethnic Greek onwards. Occasional exceptions to this rule, such as *τεσσερακόντων* (inscr. of Chios), *τριηκόντων* (Hesiod), *τριηκόντεσσι* (Anthol.) are re-formates of a late period, and so are *πέμπων* (§ 169 p. 13) and *δέκων* (§ 174 p. 22).

30. *τριᾱ́-κοντα* Ion. *τριή-κοντα* instead of **τρῑ-κοντα*. **τρῑ-* first gave place to **τριᾰ-*, since all nom. acc. pl. neut. took the termination *-ᾰ* from consonant-stems (§§ 337 ff.); then *ᾰ* was lengthened on the analogy of *τετρώ-κοντα* and *πεντή-κοντα*. Similarly we have *τριᾱ-κάς*.

40. Dor. Ion. *τετρώ-κοντα* = Idg. **qetu̯ī-*. Att. *τετταρά--κοντα* Ion. Arcad *τεσσερά-κοντα* Boeot. *πετταρά-κοντα*. Cp. § 176.

50. Att. Dor. etc. *πεντή-κοντα* = Idg. **penqē-*. Cp. § 176 p. 29. The *-η-* of this word passed on to the following multiples of ten, as in Latin the *ā* of *quadrā-gintā* passed on to *quinquā--gintā sexā-gintā* and the rest.

60. Att. Dor. etc. *ἑξ-ή-κοντα*, Cret. *ϝεξήκοντα*.

70. Att. Ion. *ἑβδομ-ή-κοντα*, Heracl. Delph. *ἑβδεμήκοντα*. It is not clear how *ἑβδομ-ή-* is to be explained (cp. *ἑβδομάς ἑβδομάκις* and *ἕβδομο-ς*). Perhaps it contains an Idg. **septom-* (cp. **-dk̂om-t-* beside **-dk̂m̥-t-*). Cp. § 171 p. 17, and the Author, Morph. Unt. V 36 ff. *ἑβδεμήκοντα* seems to be a modification of *ἑβδομήκοντα* due to the influence of *ἐνενήκοντα*. Thus modified it gave rise itself to the Epidaurian *ἑβδεμαῖος* (p. 19).

80. Hom. *ὀγδώ-κοντα* like Lat. *octō-gintā*. Att. Lesb. *ὀγδο--ή-κοντα* Heracl. *ὀγδοήκοντα* (cp. Heracl. *ὀκτώ* § 172 p. 20), like vulgar Latin *octuā-gintā* for **octovā-*. *ὀγδο-η-* (cp. *ὀγδοάς* and *ὄγδοο-ς*) presents the same difficulties as *ἑβδομ-ή-*. See § 172 p. 20 for *ὄγδοο-ς*, and the Author, Morph. Unt. V 36 ff.

90. Hom. *ἐννήκοντα* Oetean *ἐνήκοντα* for **ἐνϝ-η-* like Armen. *inn-sun*, cp. Hom. *ἐνν-ῆμαρ*; in the Homeric age the words used seem to have been *ἐνϝήκοντα ἐνϝῆμαρ* (the Author, *op. cit.* 41 ff. and 45). Att. Hom. Ion. *ἐνενήκοντα* Heracl. *ἐνενήκοντα* (cp. Heracl. *ἐννέα* § 173 p. 21) for **ἐνϝεν-ή-κοντα*, from which we should infer an Idg. stem **enu̯en- *neu̯en-*, to which it is possible to refer Lat. *nōn-ā-gintā nōn-u-s* and O.Ir. *nōicht-ech* 'of ninety years'. Cp. the Author, *op. cit.* 39 ff.

In the ordinals of the tens from 30 to 90 **-καστο-ς* became *-κοστό-ς* through assimilation to *-κοντα* in proethnic Greek (§ 176 Rem. 2 pp. 30 f.). *τριᾱκοστό-ς*. *τετρωκοστό-ς* and *τεττᾱρακοστό-ς*. *πεντηκοστό-ς*. *ἑξηκοστό-ς*. *ἑβδομηκοστό-ς*. *ὀγδοηκοστό-ς*. *ἐνενηκοστό-ς*.

Italic. No evidence is forthcoming except in Latin. *-gintā* instead of **-gontă* owed the change of its final to the analogy of *o*-stems (cp. § 342); *-i-* (earlier *-e-*) instead of *-o-* may be due either to the vowel gradation seen in different cases of the Idg. neut. pl. **k̂omt-ə*, or to the analogy of *vī-gintī* (§ 176 p. 30); as to *-g-* instead of *-c-*, the student may refer to § 177 p. 34. *trī-* is the old nom. acc. neut. *quadrā-* is the Idg. **getu̯ō̯-*; its *-ā-* passed on to the following tens, as the *-η-* of πεντή-κοντα did to ἑξή-κοντα and the rest. *quinquā-* (instead of **quinquē-*). *sexā-*. *septuā-* has been assimilated to *octuā-*. *octuā-* for **octov-ā-* (like Gr. ὀγδο-ή-κοντα) belongs to the popular language (cp. § 172 p. 21); the literary form is *octō-* (like Gr. ὀγδω-κοντα). It is uncertain whether *nōn-ā-* stands for pre-Italic **neu̯en-*, like Gr. ἐν(ϝ)εν-ή-κοντα, or for pre-Italic **neu̯n̥-*, like Gr. **ἐνϝ-ή-κοντα* (Hom. ἐννήκοντα).

Ordinals. *trīcēsimu-s* (like *vīcēsimu-s*) and *trī-gēsimu-s*. Only *-gēsimu-s* occurs in the rest of the series, *quadrāgēsimu-s* etc.

Old Irish. *-cha -ga* and *-ca* (see I § 514 pp. 375 f.) for **-k̂omt-s*, gen. *-chat* dat. *-chit -chait*. 30 *tri-cha* with original short *i*, as Bret. *tregont* shows; **trecha* would be the regular form; the word may have taken its present shape under the influence partly of *tri* 'tria', which is used before substantives as an independent word, partly of *fi-che* '20'. *tri-* is the stem, in place of nom. acc. pl. neut. **trī-*. 40 *cethor-cha* either for **c̑etura-* (nom. acc. pl. neut., cp. Gr. τετταρά-κοντα) or for **c̑etru-* (the stem, cp. Gall. *Petru-corius* and *tri-cha*); Mid.Ir. *cethracha*, which doubtless follows *cethri* 'four'. 50 *cōica*, perhaps by syllabic dissimilation (cp. Gall. *Leucamulus* for **Leuco-camulo-*, I § 643 p. 483); is the contained unit **pəŋqē-* or **pəŋqĕ-*? see the Author, Morph. Unt. V 33. 60 *ses-ca*. 70 *sechtmo-ga -go*, which may stand for **sechtm̥m-u-cont-* or for **sechtom-u-cont-* (cp. *cethorcha* for **cetru-cont-* [?] and O.Cymr. *trimuceint* '30'). Cp. the Author, Morph. Unt. V 38. 80 *ochtmo-ga* is certainly an ad-formate of *sechtmo-ga*. 90 Mid.Ir. *nōcha* or *nocha*, O.Ir. perhaps **nōicha* (cp. *nōicht-ech* 'of ninety years'); was **nō(i)ca* the older form (see I § 212 pp. 178 f. and

§ 513 p. 375) and did *tri-cha* cause the change from *c* to *ch*, or was it **nō(i)ncha*, where *ch* instead of *c* would shew that a vowel had dropped between *n* and *cha*? It remains a doubtful point whether the contained unit is **neu̯n̥-* or **neu̯en-* (cp. Gr. ἑν(ϝ)εν-ή-κοντα).

The Ordinals end in *-mad*, as 50th *cōicet-mad cōicat-mad*.

For expressions like *tri deich* '30', *cōic deich* '50' (cp. the Germanic and Balto-Slavonic) and *dā fichit* '40' *tri fichit* '60' (cp. Alban. *dü-zét*, *tre-zét*) see Stokes, Bezzenb. Beitr. XI 167 f., and Pott, Die quin. und vig. Zählm. 99 ff.

Germanic. Goth. 30 *þreis-tigjus*, acc. *þrins-tiguns*, gen. *þrijē-tigivē*. 40 *fidvōr-tigjus*. 50 *fimf-tigjus*. 60 *saíhs-tigjus*. O.H.G. *drī-ʒug* (the spirant *ʒ* is due to the preceding vowel, see I § 533 p. 390; yet on the analogy of *zwein-zug* and the following tens the word came to have *z* = *ts*, as the spelling *trīcig* etc. shews), *fior-zug*, *finf-zug*, *sehzug sehszug* (the latter a re-formate, cp. Lat. *sescentī* and *sexcentī*, § 180). As regards the origin of *tigu-* and *-zug*, see p. 31 footnote 1.

For 70, 80, and 90 we have in Gothic *sibuntē-hund ahtáutē--hund niuntē-hund*, which are mostly indeclinable, though once we find a gen. in *-is*, *niuntēhundis*; in Old High German of the oldest period, *sibunzo ahtozo* (*-z-* instead of *-ʒ-* is a re-formation) *niunzo* (not actually found, but this is a mere accident); in Old Saxon *ant-sibunta ant-ahtoda*; and in Anglo-Saxon *hund- seofontiʒ hund-eahtatiʒ hund-niʒontiʒ*. These were all ad-formates of an original expression for 100, Goth. *taíhuntē-hund* O.H.G. *zehanzo* A.S. *hund-teóntiʒ*, which will be explained in § 179. Probably the Indo-Germanic expressions for 70, 80, and 90 which answered to Goth. *þreis-tigjus* etc. lost their original meanings in proethnic Germanic, and were then superseded by this new series which follows the analogy of *taíhuntē-hund*. Yet in West Germanic there was a kind of reaction to the older type, and O.H.G. *sibunzo ahtozo niunzo* during the ninth and succeeding centuries were gradually made to conform to the type of the preceding tens, and transformed into *sibunzug ahtozug niunzug*; and similarly, in Anglo-Saxon, **hund-seofonta* became

hund-seofontiz, and the others of this set were changed in like manner. Cp. the Author, Morph. Unt. V 49 f.

The forms in *-zug* and *-zo* were still regarded as substantives in O.H.G., since they governed a genitive case; as *feorzug wehhōno*, *sibunzo wehhōno*; the present type is *in vierzig wochen* 'in forty weeks', like Skr. *pañcāśadbhir vāṇāiṣ* (§ 178 pp. 36 f).

No ordinals are found in Gothic. In O.H.G. we have *drīzugōsto* etc. like *zweinzugōsto*.

Balto-Slavonic.

Lithuanian. 30 *trỹs dẽszimtys* (stem *deszimti-*) and *dẽszimts* (stem *deszimt-*), like O.C.Sl. *četyri desęti* beside *četyre desęte*. Each word of the expression was declined independently (with the gen. pl. of the word whose number was to be expressed), as acc. *trìs dẽszimtis*, gen. *trijũ deszimtũ*. Similarly 40 *kẽturios dẽszimtys (dẽszimts)*, acc. *kẽtures dẽszimtis*, etc. These expressions are found in Old Lithuanian, and still survive as dialectic variants; but as a rule they became compounds, the unit coalescing with the ten. The accusative became the regular form in the first part, and in the second, *-deszimts* was crystallised in some dialects, as *trìs-deszimts kẽtures--deszimts* etc.; whilst elsewhere (in the literary language) *dvì--deszimt* '20' set the type for the final member, and its *-deszimt* passed on to the rest of the series, as *trìs-deszimt* etc. Other kinds of change in the older language are discussed by Bezzenberger, Beitr. zur Gesch. der lit. Spr., 181 f. — Ordinals. Old Lithuanian has such phrases as *penkta-s deszimta-s* (cp. *antra-s deszimta-s* '20th'), and such compounds as *penkta-deszimta-s*, '50th'. The forms now used, *trìsdeszimta-s kẽturesdeszimta-s* etc., have been modified by association with the cardinal. Forms with the 'vowel of composition', like *keturiã-deszimta-s* '40th' *septyniã--deszimta-s* '70th', are also said to occur. See Bezzenberger, *op. cit.* 185 f.; Schleicher, Lit. Gr. 151 f.

Slavonic. 30 *tri desęti*. 40 *četyri desęti*, and masc. *četyre desęte*. 50 *pętĭ desętŭ* = πεντὰς δεκάδων, 60 *šestĭ desętŭ* etc. — The Ordinals end in *-ĭnŭ*, *tridesętĭnŭ*, *četyridesętĭnŭ pętĭdesętĭnŭ*

etc.; sometimes they contain the 'vowel of composition' *-o-*, as *sedmodesętĭnŭ* beside *sedmĭdesętĭnŭ* '70th'.

§ 179. Hundred. The Idg. cardinal was **k̑m̥tó-m* for **dḱm̥tó-m* (§ 164 pp. 2 f.) 'group of ten (*sc.* tens)', a neuter subst. governing the gen. pl. In this word 'tens' is understood, as it is in Skr. *daśatí-ṣ*, which means both 'decas' and 'centum'. But in Goth. *taíhuntē-hund* '*δεκάδων δεκάς*' the original expression seems to have been kept without abbreviation.

Skr. *śatá-m*. Various constructions are found, — *śatḗna háriṇām*, *śatḗna háribhiṣ* and *śatā́ háribhis* 'with 100 bay steeds'; and the Veda has *śatā́ púras* as well as *śatā́ púras* '100 cities'. *śata-* in composition, as *śatá-patra-s* 'having 100 wings', but also *śatám-ūti-ṣ* 'offering a hundred helps, giving help an hundred-fold', Avest. *sate-m*.

Armen. *hariur*, of doubtful origin (cp. Ascoli, Kuhn-Schl. Beitr. V 212 f.).

Gr. *ἑκατόν*, which has become indeclinable and is used always as an adjective, as *ἑκατὸν ἀνδράσι*. This is the sole form found in composition, *ἑκατο-* having entirely disappeared; examples are *ἑκατόμ-βη ἑκατόγ-χειρο-ς* (*ἑκατόστομο-ς* may be derived from **ἑκατονστομο-ς*, as laid down in I § 204 p. 171); — we even find such compounds as *ἑκατοντα-κάρηνο-ς* (cp. *ἑκατοντάς ἑκατοντάκις*), following *τριᾱκοντά-ζυγο-ς* and the like. Arcad. *ἑκοτόν-βοια* like Ion. Att. *-κόσιοι*, cp. § 176 Rem. 2 p. 31. *ἑ-κατόν* is probably a confusion of two modes of expression, **ἁ-κατό-ν* (cp. Skr. *sa-hásra-m* 'one thousand') and **ἓν κατόν* (cp. Alban. *ńε kint* O.H.G. *ein hunt* 'one hundred'), which were used interchangeably like Skr. *dvi-śatá-m* and *dvḗ śatḗ* '200'.

Lat. *centum*, like *ἑκατόν*, is crystallised and used as an adjective; but *centi- (centu-)* is found in compounds, as *centi-manu-s*, though we also have *centum-pondiu-m centum-peda* etc. (cp. Skutsch, De nominum Lat. compositione, p. 37).

O.Ir. *cēt*, declined as a neuter *o*-stem. Also *cōic fichit*.

Goth. *hund* O.H.G. *hunt* n. only in 200 and the following hundreds: Goth. *tva hunda* O.H.G. *zwei hunt* etc., whence *ein hunt*, but only in late O.H.G. The word for hundred in

Gothic was *taí-huntē-hund* (sometimes distorted into *taíhuntaí--hund*), in Anglo-Saxon *hund-teóntiʒ* instead of *-*teónta*, in the earliest Old High German *zehanzo* (*hunt* being dropped), lit. 'δεκάδων δεκάς'; *taíhunt-* = δεκαδ-, common ground-form **dek̑-ṇd-*, cp. Wheeler, Der griech. Nominalaccent p. 38, and in this work vol. I p. 199 footnote 1 and § 469. 7 p. 346. I regard this, as I have already said, as being the oldest Indo-Germanic mode of designating a hundred, and I consider the old Germanic expressions for 70, 80, and 90 to be re-formates following the analogy of the number 100, Goth. *sibuntē-* being equivalent to Gr. ἑπτάδων, and *niuntē-* to Gr. ἐννεάδων. See § 178 p. 40, and the Author, Morph. Unt. V 11 ff., 139 ff., and 268. O.H G. *zehanzo* with *a* like *zehan*, see § 174 p. 23. With regard to O.Sax. *ant-* in *ant-sibunta*, which is a distorted form of *hund-*, see the Author, *op. cit.* p. 142, and what is said in § 352 of this volume on Norse Runic *þri-taunta*.

Lith. *szim̃ta-s* (which has become masculine, see § 403) and O.C.Sl. *sŭto* are in living use as substantives. In *sŭto* the *ŭ* is strange; perhaps the word was borrowed (cp. the Author, Techmer's Internat. Ztschr. I 251; G. Meyer, Alban. Stud. II 13 f.); we should expect **sęto*, which seems to be represented in *tysęšta* for **ty-sęt-i̯ā*; see § 181.

For the Ordinal, the original proethnic expression has not been clearly determined. Only two branches of the language agree in a formation which could be regarded as proethnic: Skr. *-śatá-* Lith. *szim̃ta-s*.

Skr. *śata-tamá-s* Avest. *satō-tema-* (for the *-ō-* cp. II § 73 p. 178). Sanskrit has also *śatá-* in composition, as *ēkaśatá-s* '101st'.

Armen. *hariur-ord*, *hariur-erord*.

Gr. ἑκατ-οστό-ς following τριᾱκοστό-ς etc., cp. also ἑκατοντα--κάρηνο-ς on the last page.

Lat. *cent-ēsimu-s* following *trīcēsimu-s* etc.

O.Ir. *cēt-mad*.

O.H.G. *zehanzug-ōsto*.

Lith. *szim̃ta-s (szimtàs-is)*; it is certainly wrong to assume

that this stands for **szimta-ta-s*, as Bezzenberger does, or for **szimt-ta-s*, with Pott and Schleicher. O.C.Sl. *sŭt-ĭnŭ*.

§ **180.** Two Hundred to Nine Hundred.

Cardinal and Abstract Series. The parent language had two methods of expressing these multiples of a hundred. The unit might be prefixed to **k̑m̥tó-m*, both being in the same case and in the dual or plural number; as **du̯oi̯ k̑m̥toi̯* du. '200', **trī k̑m̥tā* pl. '300' and so forth. This usage is found in Aryan, Irish, Germanic, and Balto-Slavonic. The other mode was to make a singular compound, whose first part was the stem of the unit; as **du̯i-k̑m̥tó-m* 'the state of being 200', *tri-k̑m̥tó-m*, etc. This appears in Aryan, Greek, and Latin.

Aryan. Skr. 200 *dvé śaté* and *dvi-śatá-m*, and later a re-formate *dviśatī* f.[1]), 300 *trīṇi śatáni* and *tri-śatá-m triśatī* etc. Avest. 200 *duyē̥ saitē̥* (for *duyē̥* see Bartholomae, Handb. § 92), 500 *panca sata*, 900 *nava sata*.

Armenian. 200 *erku hariur* and *erkeriur*, 300 *erek̑-hariur*, 400 *č̣orek̑-hariur* etc.

Greek. A group of compounds formed with *-κατιο-* (so Dor. and Boeot., *-κασιο-* Arcad., *-κοσιο-* Ion. Att., as to the first *ο* of which see § 176 Rem. 2 p. 31 and § 179 p. 42) was derived from the neuter abstract series by adding *-i̯o-*. For example, *τετρακάτ-ιο-* 'connected with the state of being 400, consisting of 400' is derived from **τετρακατο-ν* 'the state of being 400'; cp. Skr. *-śat-ya-*, as *ṣaṣṭriṣacchatya-s* 'consisting of 136' *śatín-* (Ved.) 'forming a group of 100, hundredfold' (where *-in-* stands for from *-i̯o- -en-*, see II § 115 pp. 357 f.); and cp. also Goth. *þūsundi* O.C.Sl. *tysęšta* '1000' (§ 181), which is probably to be derived from **tūs-k̑m̥t-i̯o-* 'containing many hundreds', and the same suffix *-i̯o-* in *χίλ-ιο-* Skr. *sahasr-iya-* (§ 181). Hence the use of the singular, for example, in Thucydides I 62 *τὴν διακοσίαν ἵππον* 'cavalry consisting of a group of 200' and Xenophon Cyr. IV 6 2 *ἵππον ἔχω δισχιλίαν τριακοσίαν*. This series of

1) Kluge holds that these compounds in *-śatī* are original forms, of which the Greek and Latin words in *-centī* and *-κάτιοι* are trans-formates (Paul's Grdrss. I 406). This view is untenable.

derivatives in *-ιο-* then superseded constructions corresponding to Skr. *dvé śaté* and *dvišatá-m*, which must have once existed in Greek, precisely as *χίλιοι* has ousted **χεσλο-ν*, which answered to the Skr. *sahásra-m*. 200 *διᾱκόσιοι*; Ion. *διηκόσιοι* instead of **δι-κόσιοι* by assimilation to 300 *τριᾱ-κόσιοι* Ion. *τριηκόσιοι*. This latter form itself may have arisen from a blending of **τρι-κόσιοι* with **τρία κατά* (Skr. *trī́ṇi śatā́ni*), the *α* being lengthened after the analogy of *τριᾱ́-κοντα* (cp. § 178 pp. 37 f.); or, as seems to me more probable, it was transformed from **τρι-κόσιοι* after the analogy of *τριᾱ́-κοντα*, as the Homeric *πεντηκόσιοι* undoubtedly has been assimilated to *πεντή-κοντα*. 400 *τετρακόσιοι*. 500 *πεντακόσιοι* instead of **πεντε-κόσιοι*, like *πεντά-πηχυς* etc., see § 169 p. 13. 600 *ἑξακόσιοι*, like *ἑξά-πολις* etc., see § 170 p. 16. 700 *ἑπτακόσιοι*. 800 *ὀκτακόσιοι*, like *ὀκτά-πους* etc., see § 172 p. 20. 900 *ἐνακόσιοι*. Cp. the Author, Morph. Unt. V 7 ff.

Italic. Only Latin has any examples. The neuter abstract series is represented by O.Lat. forms with *-centum -gentum, du-centum* 'a group of 200', etc. Their original character is seen most clearly when they govern the genitive case, in descriptions of weight and measure with *aeris, aurī, frūmentī* and the like, as *argentī sescentum* (Lucilius). And in one instance *nōngentum* is used as a crystallised adjective, precisely as *centum* is, *C. I. L.* IV 1136 *locantur balneum Venerium et nongentum tabernae pergulae cenacula*. *ducentum* became the plural adjective *ducentī* in very much the same way as Gr. **δεκαχειλον ἀνδρῶν* becomes *δεκάχειλοι ἀνέρες* (Hom.), and Skr. *pañcāśatā vāṇānām* becomes *pañcāśadbhir vāṇāiš*, etc. (§ 178 pp. 36 f.). *nōngentu-s* 'belonging to 900' (Plin. XXXIII 2 § 31) is an instructive form; it is related to *nōngentu-m* as *tri-viu-s* 'connected with three ways' to *tri-viu-m* 'place where three ways meet'. *du-centī* like *du-plex* etc., § 166 p. 7. *trĕ-centī*, cp. § 167 p. 8. *quadrin-gentī* instead of **quadru-*, following *septin-gentī*. *quin-gentī* (*quincentum* Fest.) for **quinque-cento-*. *sescentī* like *misceo* for **mic-sceō* (I § 503 p. 369), and, once more assimilated to *sex*, *sexcentī*, cp. O.H.G. *sehs-zug* '60' instead of *sehzug*, which is

also found (§ 178 p. 40). *septin-gentī. octin-gentī* instead of **octi-* or **octō-* following *septin-gentī. nōn-gentī*, and in Columella *nōn-in-gentī* following *septin-gentī.* The *-g-* and *-c-* have been discussed in § 177 p. 34, where we concluded that the sound represented by *g* is probably Idg. *ĝ*; and that if the voiced character of the consonant is really so old, these Latin numerals are based upon proethnic stem-compounds, **du̯i-k̑m̥tó-m* and so forth. Cp. the Author, *op. cit.* 3 ff.

Old Irish. 200 *dā cēt*, dat. *dib cētaib*, 300 *tri cēt* etc.

Germanic. 200 Goth. *tva hunda* (dat. *tváim hundam*) O.H.G. *zwei hunt*, 300 Goth. *þrija hunda* O.H.G. *thriu hunt* etc. O.H.G. also has such phrases as *zwiro zehanzug* 'twice 100', *finfstunt zehanzug* 'five times 100', cp. Gr. *δισ-χίλιοι.*

Lith. 200 *dù szimtù* or *dùszimtu*, 300 *trỹs szimtaĩ* or *trỹ(s)szimtai* etc. In Bretken we find *szimtas* crystallised in the singular form: *du szimts vyru* '200 men', *szeszi szimtas vyru* '600 men' etc. O.C.Sl. 200 *dŭvě sŭtě*, 300 *tri sŭta* and so forth.

Ordinals.

Sanskrit. Here the words are associated with the neuter abstracts: 200th *dvišatá-s* and *dvišatatamá-s*, 300th *trišatá-s* and *trišatatamá-s* etc.

Armen. 200th *erkeriur-erord* etc.

Gr. *διᾱκοσι-οστό-ς, τριᾱκοσι-οστό-ς* etc. are re-formates like *ἑκατ-οστό-ς*, see § 179 p. 43.

Lat. *ducent-ēsimu-s trecent-ēsimu-s* and so forth (besides *nōngentēsimu-s* Priscian vouches for *nōningentēsimu-s*, which is like *nōningentī*, for which see above).

Remark. Priscian has preserved certain forms which do not occur elsewhere, namely *ducēsimus trecēsimus quadrigēsimus quingēsimus sescēsimus septigēsimus octigēsimus nōngēsimus.* These cannot be really an old series, simply for the reason that *-cēsimo-* must represent **-cent + tumo-*, and *-cent-* (instead of *-cento-*) cannot have been really an old expression for 100. They look as though the names for the multiples of ten, *vī-cēsimu-s* and the rest, had been altered by the stem being substituted for the old case or quasi-case, the meaning of so many hundreds being given to the new word.

O.Ir. and O.Germ. No forms preserved.

Lith. 200th *duszimtàs-is* etc. O.C.Sl. 200th *dvosŭtĭnŭ* (where the 'vowel of composition' has found its way into the word), 300th *trisŭtĭnŭ*, and so forth.

§ **181.** Thousand. The different languages do not agree in their modes of expressing a thousand; hence we cannot be sure how it was expressed in the parent language. See § 164 p. 2.

**ĝhéslo-* is the form indicated by Skr. *sa-hásra-m* Avest. *ha-zaŋre-m*, Gr. Lesb. *χέλλ-ιοι* Dor. *χήλιοι* Ion. *χείλιοι* (I § 565 p. 423); Att. *χῖλιοι* may come from Idg. **ĝhẓló-*, see Thurneysen, Kuhn's Ztschr. XXX 353. Skr. *sa-hásram* 'one thousand' like Gr. *ἑ-κατόν* 'one hundred', see § 179 p. 42; *sahásram ŕṣīṇām* and *sahásram ŕṣayas* '1000 bards', like *śatám ŕṣīṇām* and *śatám ŕṣayas*; and, with the number assimilated, *sahásrāṇy ádhirathāni* '1000 waggonloads' like *śatā́ púras*. In Greek, **ἐννεαχειλο-ν* 'a group of 9000' and **δεκαχειλο-ν* 'a group of 10,000' became plural adjectives: Hom. *ἐννεάχειλοι*, *δεκάχειλοι* (cp. § 180 p. 45), Idg. **ĝhesl-iio-* 'consisting of 1000': Skr. *sa-hasr-íya-* 'consisting of 1000, thousandfold', e. g. *sahasríyō bhāgás* 'a share consisting of a thousand, thousandfold share', Gr. *χῖλιο- χείλιο-*, like *ἵππος δισχῑλίᾱ* (see p. 44), and further *χῖλιοι ἄνδρες* like *τριᾱκόσιοι ἄνδρες* (see p. 45). Ordinals: Skr. *sahasra-tamá-s*, Gr. Att. *χῑλι-οστό-ς*.

Armen. *hazar* is borrowed from the Iranian.

Lat. *mille mīlia* (*meilia* in Lucilius); it is often connected with Gr. *μύριοι* (see L. Havet, Mém. de la Soc. de ling., III 415, and Thurneysen, Kuhn's Ztschr. XXX 353); but I do not consider that this connexion has, been proved. *mill-ēsimu-s* like *cent--ēsimu-s*.

O.Ir. *mīle* (I do not know whether the ordinal *mīl-mad* has been found) was probably borrowed from the Latin.

Goth. *þūsundi* f., in one place neuter, (in *tva þūsundja* '2000'; but this form may be regarded as a nom. du. fem. in Idg. **-ai̯*, see § 286), O.H.G. *dūsunt thūsunt* f. and n. Lith. *túkstanti-s* gen. *-czio* (Lett. *tûkstût-s*), ordinal *tukstantỹs-is*; O.C.Sl. *tysęšta tysąšta* f. for **-enti̯ā *-onti̯ā*, ordinal *tysęštĭnŭ*. On the strength of the Frankish *thūs-chunde thius-chunde* (from

the dialect of the Salii, one of the three great branches of the Franks) O.Icel. *þūshundrað* and West-Goth. *thyu-phadus* 'chiliarch, leader of a thousand' (cp. *þūsundi-faþs* in Wulfila), it has been prettily suggested that this word, common to Germanic and Balto-Slavonic, is a compound of an adjective **tūs-* and the word for 100. **tūs-* would be a word connected with Skr. *tavás-* 'strong, strength' *tuvíṣ-ṭama-* 'strongest', showing the weak form of the stem, cp. Skr. instr. *bhīṣ-ā́* from *bhiyás-* 'fear'. The meaning of this compound would be 'a group of many hundreds'; see Scherer, Zur Gesch. der deutsch. Spr.[2] 590, Bugge in Paul-Braune's Beitr. XIII 327, and Kluge, Paul's Grundr. I 406. The *-n-* of the Lithuanian and Lettic words (cp. Pruss. *tūsimto-ns* acc. pl.) is enough to shew that some analogical transformation must have affected them; perhaps they were associated with the participle of the present (Lett.) *tūkstu* 'I swell'. Cp. the Author, Morph. Unt. V 10 f.

MULTIPLICATIVES AND DISTRIBUTIVES.

§ **182.** Multiplicatives.

1. Numeral Adverbs and Adverbial expressions. The parent language had adverbs ending in *-s* for twice, thrice, and four times.

'Twice' **du̯i-s (*du̯u̯i-s)*, cp. **du̯i-* in composition and used independently § 166 p. 7. Skr. *dvíṣ*, Ved. *duvíṣ*, Avest. *biš*. Gr. *δίς*. Lat. *bis*, O.Lat. *duis* also, see § 166 Rem. 1 p. 7. Goth. *tvis-* 'apart'. Mid.H.G. *zwis*, O.H.G. *zwir-or zwir-o*, O.Icel. *tvis-var* 'twice', and further O.H.G. *zwis-k zwis-ki* adj. 'twofold', O.Icel. *tvis-t-r* 'divided into two parts' Engl. *twis-t*, i. e. a cord or thread of two strands.

'Thrice' **tri-s*. Skr. *tríṣ*, Avest. *þriš*. Gr. *τρίς*. Lat. *ter* perhaps for **ters* and this for **tris* (I § 33 pp. 33 f.); beside which we find *trīnu-s* for **tris-no-* (§ 183). O.Ir. *tress-* 'third. doubtless for **tris-to-* (II § 81 p. 247). O.H.G. *drir-or* O.Icel' *þris-var* 'thrice', cp. *zwir-or tvis-var* above mentioned; O.H.G. *dris-k dris-ki* 'ternus'.

'Four times'. Skr. *catúr* for **caturṣ* (I § 647. 7 pp. 493 f.)

Avest. *caþruš*, cp. Skr. *catur-daśa* as contrasted with Avest. *caþru-dasa* etc. discussed by Wackernagel in Kuhn's Ztschr. XXV 283 f. Lat. *quater*, the ending transformed by association with *ter*: cp. *quaternu-s* : *ternu-s*.

There seems to have been another mode of expression in the parent language, to which are due the following: Skr. *sa-kṛ́t* 'once, one time' *páñca kṛ́tvas* 'five times', Lith. *vẽną kařąt* 'once' *dù kartù* 'twice' *trìs kartùs* 'three times' O.C.Sl. *dŭva kraty* 'twice' *pętĭ kratŭ* 'five times'.

Uses peculiar to single languages:

Skr. *ēka-vāram* 'once' *tri-vāram* 'thrice' from *vāra-* 'the right moment for something, one's turn'. Avest. *biž-vaþ* 'twice' *þriž--vaþ* 'thrice', neuters of forms with the suffix *-u̯ent-* (cp. below, under 2); *þrisat-a-þwem* '30 times' (suffix *-tu̯o-*).

Gr. *ἅ-παξ* 'once'; the second part is connected with *πήγνυμι* 'I make fast, strengthen' *πάσσαλο-ς* 'peg', and probably had at first much the same meaning as another word belonging to the same root, namely O.H.G. *fah* 'part, portion' A.S. *fæc* 'space of time, time' (cp. Mid.H.G. *zwi-vach*, *manec-vach*.) The adverbs from 'four times' onwards end in *-κι* or *-κις* (Dor. *-κιν*): *τετρά-κι*, *πεντά-κι* etc. The same *-κι* occurs in *οὐ-κί πολλά-κι*; it was doubtless a nom. acc. sing. neut. with the meaning 'hoc' (cp. Lith. *szì-s* O.C.Sl. *sĭ* 'hic', § 409); cp. Osthoff, Morph. Unt. IV 241 f., and the Author, Gr. Gr.[2] p. 131.[1])

Lat. *semel*; Wackernagel, Kuhn's Ztschr. XXX 316, conjectures that this word comes from **sm̥-mēli* and is connected with Goth. *mēl* 'time' (Mod.H.G. *-māl*). The adverbs from 'five times' onwards end in *-iēns -iēs*: *quinquiēs sexiēs* etc. (and *totiēs quotiēs*), Umbr. nuvis 'novies'. Many conjectures have been made as to the origin of this ending; the most likely of them is Pott's, connecting it with Skr. *kíyant-* 'how great? how much? how manifold?' *íyant* 'so great, etc.' (cp. the Author, Morph.

1) If *-κι* were the interrogative pronoun **gi-*, as is assumed by Wackernagel (Kuhn's Ztschr. XXV 286 f.) and J. Schmidt (Pluralb. 352), all the dialects but Thessalian must have had *-τι* in place of it. I therefore oppose this view. For Thess. *κί-ς*, see my Gr. Gr.[2] pp. 54 f.

Unt. V 14). Thurneysen's view (Arch. für lat. Lexicogr., V 275 f.) as to *-iens* is probably to be accepted; he regards it as a pro-ethnic Italic transformation of **-ient*, so that *kíyat*, the neuter of the Sanskrit form, would exactly correspond to it. Osc. *petiro- -pert* 'quater', cp. Lat. *semper*.

O.Ir. *oen-fecht oenecht* 'once' (*fecht* 'way, course'), *fo dī* 'twice', *fo thrī* 'thrice' etc.

Goth. *áinamma sinþa* 'once' *tváim sinþam* 'twice' etc. O.H.G. *eines* (gen. sing.) 'once', *drīo-stunt fior-stunt* etc. (*stunta* 'section of time'); also expressions with *warb*, as *sibun warb* (*hwarba* 'a turning round'); with *spurt* 'stadium', as *drim spurtim*; and with *māl* 'point of time', as *z'einemo māle* 'one time, once', *zu drin mālen* 'thrice'. And see further: J. Grimm, D. Gr. III 231 ff., and Rumpelt, Die deutsch. Pron. und Zahlw. 167 ff.

Lithuanian has also a set of phrases with *sỹki-s* 'blow, stroke', as *penkìs sykiùs* 'five times', cp. the Upper German *schlag* 'blow' = *mal*. O.C.Sl. has phrases with *-š(ĭ)di -ždi* (from *šĭd-* 'to go'): *dvašdi* 'twice' *trišdi* 'thrice' etc. (cp. Leskien, Handbuch p. 95).

2. Adjectives.

With *-u̯ent-* (II § 127 p. 404): Avest. *vīsaiti-vant-* 'twenty-fold' *þrisaþ-want-* 'thirtyfold' *xšvašti-vant-* 'sixtyfold', Gr. *τετρᾶς -ᾶντος*, a coin worth four *χαλκοῖ*, for **τετρα-ϝεντ-*, of which *τριᾶς* is an ad-formate.

The following are etymologically connected: Gr. *ἁ-πλό-ς δι-πλό-ς* etc., *δί-παλτο-ς τρί-παλτο-ς* and *δι-πλάσιο-ς τρι-πλάσιο-ς* etc., Lat. *sim-plu-s du-plu-s tri-plu-s* etc., Goth. *áin-falþ-s fidur--falþ-s* O.H.G. *ein-falt zwi-falt dri-falt* etc. These are related to Goth. *faltan* 'to fold' Skr. *puṭa-s puṭa-m* 'a fold' (cp. I p. 209 footnote 1), as Lat. *sim-plex du-plex* etc. to *plectere plicāre* (J. Schmidt, in Kuhn's Ztschr. XVI 430, gives an explanation which may, I believe, be reconciled with this, although at first sight it seems to be different); but the second *r* of Umbr. *tri--brisine* 'triplicitate' (*-br-* for *-pr-* quite regular, I § 499 p. 366) as compared with tri-pler 'triplis' *du-pla* 'duplas', has not been explained. Gr. *-πλόο-ς* in *ἁ-πλόο-ς* etc. we may conjecture to

be akin to *πλοῦ-το-ς*, and to have been early associated in the popular mind with *-πλο-ς*.[1])

There remain a large number of other formations answering to Modern German adjectives in *-fach -fältig* '-fold'. Of these a few examples may be given. Skr. *cátur-vaya-* 'fourfold', *dáśa-gva- daśa-gvín-* 'tenfold', *tri-vártu-ṣ tri-vṛt-* 'threefold', Gr. *τρί-φατο-ς τρι-φάσιο-ς* 'threefold'; Lith. *dvì-linka-s* 'twofold' (*liñki-s*, gen. *liñkio*, 'a bending'), O.C.Sl. *dvo-gubĭ -gubĭnŭ* Lith. *dvì-guba-s* Pruss. *dwi-gubbu-s* 'twofold' (O.C.Sl. *gŭ(b)nąti* 'to bend, incline, fold, move', Lett. *gub-stu* 'I crouch, bow' Lith. *guba* 'stack, rick').

§ **183.** Distributives. The oldest mode of expressing distributives was to repeat the numeral, as Skr. *páñca-pañca* 'five each' (Rig-Veda III 55 18), *ḗka-ēka-s (ḗkāika-s)* 'one each, one at a time', *pū́rvas-pūrva-s pūrva-pūrva-s* 'the first on each occasion' (cp. II § 53 p. 99), *dvan-dvá-m* 'two at a time, a pair', Armen. *mi mi* 'singuli' *tasn tasn* 'deni', Aesch. Pers. 981 *μυρία μυρία πεμπαστάν = κατὰ μυριάδας πεμπάζοντα.* Cp. Pott, Ztschr. der deutsch. morg. Ges., XII 458 ff., Doppelung pp. 156 ff.; Lobeck, Pathol. I 184; Winer, Gr. des neutest. Sprachidioms[7] p. 234; Wölfflin, Zur distributiven Gemination, Archiv für lat. Lex. II 323.

Adverbs: Skr. *-ṣ́ás*, as *ēka-ṣ́ás* 'singly, one after another' *dvi-ṣ́ás* 'by twos, in pairs' *ṣ́ata-ṣ́ás* 'by hundreds': cp. Gr. *ἑ-κάς* 'by itself, apart, afar' *ἀνδρα-κάς* 'man by man'.

Adjectives with the suffix *-no-*. Lat. *bīnu-s* for **bis-no-*, *trīnu-s* for **tris-no-* and *ter-nu-s*, *quater-nu-s*, *sēnu-s* for **sexno-*, etc. (cp. J. Baunack, Kuhn's Ztschr. XXV 257 ff.). O.Icel. has corresponding forms, *tvenner þrenner ferner* pl. 'two, three, four at a time' for pr. Germ. **tu̯iz-na-* etc., compare Mid.H.G. *zwirn* m. 'thread of two strands' O.H.G. *zwirnēn zwirnōn* 'to twist'. Goth. *tvei-h-nái* 'two at a time, two each', perhaps by a fusing of two suffixes *-qo-* and *-no-*. Lith. *dvynù* du. 'twins'.

1) In the derivation of *-πλο-ς* from *-πλοο-ς* by 'hyphaeresis' I have no belief whatever. Cp. the Author, Ber. der sächs. Ges. der Wiss. 1889, pp. 51 and 52.

Lith., with the suffix *-io-*, *tre-jì* 'three at a time' *ketver-ì* 'four at a time', and by ad-formation *penk-erì szesz-erì* etc. Cp. Avest. *tūirya-* 'fourth' *ā-xtūirya-* 'to be spoken four times' (used of a certain prayer).

THE CASES.[1])

General Remarks.

§ 184. A noun or pronoun can express Case, Number, and Gender.

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1) On the Indo-Germanic cases in general: Bopp, Vergl. Gr. I[3] § 112 ff. p. 245 ff. Schleicher, Compendium[4] p. 497 ff. Fr. Müller, Grdr. der Sprachw. III 529 ff. Bopp, Über das Demonstrativum und den Ursprung der Casus (Abhandl. der Berl. Akad. der Wiss., 1826). Scherer, Zur Gesch. der deutsch. Spr.[2] 382 ff. Düntzer, Die Declination der idg. Sprachen nach Bedeutung und Form entwickelt, 1839. Schleicher, Über Einschiebungen vor den Casusendungen im Indogermanischen, Kuhn's Ztschr. IV 54 ff. Grassmann, Über die Casusbildung im Indogerm., *ibid.* XII 241 ff. Ludwig, Über den vocalischen Ausgang der Bildungssuffixe, *ibid.* XV 443 ff. Stenzler, Über die verschiedenen Conjugationen und Declinationen in den Idg. Sprachen, bes. im Lat., Abhandlungen der Schlesischen Gesellsch. für vaterländ. Cultur, Philosoph.-hist. Abtheil. 1864, Heft I. Hübschmann, Zur Casuslehre, 1875. Bergaigne, Du rôle de la dérivation dans la déclinaison indo-européenne, Mém. de la Soc. de ling. II 358 sqq. Bréal, Sur le nombre des cas de la déclinaison indo-européenne, *ibid.* III 322 sqq. Penka, Die Entstehung der syncretistischen Casus im Lat., Gr. und Deutschen, 1874. *Id.*, Die Nominalflexion der idg. Sprachen, 1878. Whitney, General Considerations on the Indo-European Case System, Trans. of the Am. Phil. Assoc., XIII 88 ff. De la Grasserie, Ét. de gramm. comp.: Des relations grammaticales considerées dans leur concept et dans leur expression ou de la catégorie des cas, Paris 1890. Leskien, Die Partikel *-am* in der Declination, ein Beitrag zur Analyse der idg. Casusendungen, Ber. der sächs. Gesellsch. der Wiss., 1884, p. 94 ff. Wenck, Zur idg. Casusbildung, Borna 1884. The Author, Zur Geschichte der stammabstufenden Declinationen, Curtius' Stud. IX 361 ff. Osthoff, Zur Frage des Ursprungs der germ. *n*-Declination, nebst einer Theorie über die ursprüngliche Unterscheidung starker und schwacher Casus im Idg., Paul und Braune's Beiträge III 1 ff. Hillebrandt, Zur Lehre von den starken und schwachen Casus, Bezz. Beitr. II 305 ff. Regnaud, Examen du mouvement vocalique dans la déclinaison des thèmes indo-européens en *u*, *i*, *r* et questions connexes, 1883. Collitz, Die Flexion der Nomina mit dreifacher Stammabstufung im Altind. und im Griech., Bezz. Beitr. X 1 ff. Strachan,

The Cases. The original language had seven cases: Nominative, Accusative, Genitive, Ablative, Dative,

Abstufung in Case-endings, *ibid.* XIV 173 ff. L. Havet, Le renforcement dans la déclinaison en *A*, Mém. de la Soc. de ling. II 9 sqq. *Id.*, Sur la déclinaison des thèmes féminins en *A*, *ibid.* II 387 sqq.

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Locative, and Instrumental. It has always been the custom to define and arrange the whole mass of recorded forms under

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Italic. Lindsay, The Early Latin Declension, Class. Rev. II 129 ff. and 273 ff. Kühner, Ausführl. Gr. der lat. Spr., I p. 172 ff. Stolz, Lat. Gr. (J. Müller's Handb. des Klass. Alt. II²), p. 332 ff. F. Neue, Formenlehre der lat. Sprache, I² und II² 1 ff. K. L. Struve, Über die lat. Declination und Conjugation, 1823. Ek, De formis casuum Latinorum, Gotoburgi 1839. F. Bücheler, Grdrss. der lat. Decl. (1866), new edition by Windekilde, 1879; French translation (Précis de la decl. lat.) by L. Havet, with additions by the author and the translator, Par. 1875. Stoesser, Lat. Decl. der Substantiva und Adjectiva auf Grund der Ergebnisse der vergleich. Sprachforschung, 1872. Merguet, Die Entwickelung der lat. Formenbildung mit beständiger Berücksichtigung der vergl. Sprachforschung, 1870, p. 7 ff. Fumi, Note glottologiche, I: Contributi alla storia comparata della declinazione latina, Palermo 1882. Walter, Zur Declination der *u*-Stämme im Lateinischen, Kuhn's Ztschr. IX 370 ff. Stolz, Zur lat. Decl., Wiener Stud. VI 136 ff. Aug. Müller, De priscis verborum formis Varronianis, 1877, p. 22 sqq. Schuchardt, Lateinische und Romanische Declination, Kuhn's Ztschr. XXII 153 ff. H. d'Arbois de Jubainville, La déclinaison latine en Gaule à l'époque mérovingienne, Par. 1872. W. Meyer, Die Schicksale des lat. Neutrums im Romanischen, 1883. E. Appel, De genere neutro intereunte in lingua Latina, 1883. Suchier, Der Untergang der geschlechtlosen Substantivform, Arch. für lat. Lex. und Gr., III 161 ff. G. Koffmane, Lexicon lateinischer Wortformen, 1874. Georges, Lexikon der lat. Wortformen, 1889 (not yet completed). — Zeyss, De substantivorum Umbricorum declinatione, Tilsit 1846—1847. C. Stephany, De nominum Oscorum declinatione cum Latinis comparata, Rostock 1874.

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these seven heads. But since meaning, and not form, is the basis of this classification, it often happens that forms etymologically distinct are grouped together, as in the Lat. gen. sing. *equī* and (O.Lat.) *equās*; whilst others which are really connected are separated, as in Skr. *mē* dat. and gen., or the *bh*-suffixes, which have one part, and that the most important, in common.

Details of case-usage will be found in the Syntax; this is the place only for a few general remarks. The Nominative implied that the noun idea was the central point of the action expressed by the verb. The Accusative brought the noun into some dependent relation to the verb, the exact relation being determined by the sense of the verb and noun in any given instance

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Works and Essays treating of single cases will be cited below.

(accusative of object, of result, and so forth). The Genitive expressed some relation between noun and noun, this also being determined by their sense (genitive of origin, of object, and so forth); it also attached a noun to a verb in such a way that only a part (greater or less) and not the whole of it was affected or mastered by the action of the verb; and thirdly, it formed adverbs of time and place. The Ablative denoted that the noun was the source from which the verbal action came. The Dative denoted that the noun was that for which the action of the verb held good, or to which it was directed. The Locative gave the sphere in which something was or some action took place, the goal of motion and the place where a moving thing comes to rest. Lastly, the Instrumental expressed that with which something was (accompaniment), or with which something was done (means).

The Vocative is traditionally classed with these as an eighth case. But this was merely a method of address, or call, standing outside the sentence as far as syntax was concerned, and therefore not properly a case at all.

Numbers. There were three numbers, Singular, Plural, and Dual. The Singular expressed unity, and this number served for both single and collective ideas. The Plural denoted a number of similar things, and was also used where the same thing had a variety of forms or phases (as Skr. *mṛtyávas* Gr. *θάνατοι* 'kinds of death'); it further denoted anything complicated, anything which consisted of parts or sections (e. g. Skr. Ved. *dhūmásas* Lith. *dúmai* 'smoke'). The Dual was used of two complementary things, commonly where by nature or convention they formed a pair. Further discussion of these points will be found in the Syntax.

Genders. Lastly, there were three Genders in the parent language, Masculine, Feminine, and Neuter. The gender depended not so much on what we call case-suffixes as on the stem of the word, and it has accordingly been discussed under Formative Suffixes; see especially II § 57 Rem. p. 106, § 145 p. 458. More will be said of this in theSyntax.

§ 185. The manner in which particular relations of case, number and gender were expressed was in most instances the same: the stem received an accretion sound of which brought with it some one of these meanings. But we cannot always tell exactly what the accretion was. In a certain number of forms, the point where the new part joined on to the old is quite clear, so that we may use a hyphen to divide the ending from the stem; e. g. in the nom. sing. **nāu̯-s* (= Skr. *nāú-ṣ* Gr. *ναῦ-ς*) and **ek̑u̯o-s* (= Skr. *áśva-s* Lat. *equo-s*), in the nom. sing. neut. **jugo-m* (= Skr. *yugá-m* Lat. *jugu-m*), and in the loc. pl. **nāu̯-su* (= Skr. *nāu-ṣú*, cp. Gr. *ναυ-σί*). In others it is a moot point how far we are justified in making a division: examples are the dat. sing. **ek̑u̯ōi̯* (= Gr. *ἵππῳ*, cp. Avest. *haomāi* dat. 'the soma plant') and in the nom. pl. **ek̑u̯ōs* (= Skr. *áśvās*, cp. Goth. *vulfōs* 'wolves'). These forms might, it is true, be analysed **ek̑u̯ō-i̯* and **ek̑u̯ō-s*, *-ō-* being explained as a lengthening of *-o-* (ablaut), and as a matter of fact the *-i̯* and the *-s* were no doubt regarded in the unreflecting consciousness of the speaker as exponents of the relation in which these words stood to their sentence, even though the length of the stem-vowel served as a further mark to distinguish these cases from others, as from the nom. and acc. sing. Still, there is no reason why they should not have come from **ek̑u̯oai̯* and **ek̑u̯oes* by vowel-contraction (cp. I § 115 p. 107). If so, *-ai̯* and *-es* would have been the proper case-endings at a period earlier than that which came just before the gradual dissolution of the parent language.[1])

But these accretions to the stem were not indispensable; case, gender, or number could be expressed by the stem alone. For example, **ek̑u̯ā* (= Skr. *áśvā* Lat. *equa*) was nom. sing., cp. loc. pl. Skr. *áśvā-su*; **me* (= Gr. *μὲ* Goth. *mi-k*) was acc., cp. Lat. *mi-hī* Skr. *má-hyam*; **dhēmen* and **dhəmen* (= Skr.

1) Johansson (Bezz. Beitr. XIV 156) refuses to allow the rules for vowel contraction in the proethnic language which were given in the passage of the first volume of this work cited above. I freely admit that if that paragraph were to be written over again, I should state most of these contractions with more reserve.

dhâman, Gr. infin. *θέμεν*) were loc. sing., cp. dat. sing. Skr. *dhâman-ē* Gr. inf. *θέμεν-αι*; **pl̥lu* (= Skr. *purú* O.Fris. *fulu*, cp. Gr. *πολύ* Goth. *filu*) and **dusmenes* (= Skr. *durmanas* Gr. *δυσμενές*) were nom. acc. neut., cp. nom. sing. masc. Skr. *purú-ṣ* Gr. *πολύ-ς* and acc. sing. masc. Skr. *durmanas-am* Gr. *δυσμενέ-α*.

There was another mode of expressing these three relations. This was by giving to the ending of the stem a particular grade of Ablaut. For example **pətēr* (= Gr. *πατήρ* Lat. *pater*) and **dusmenēs* (= Skr. *durmanās* Gr. *δυσμενής*) were singular nominatives, marked as such partly by the *ē* (*-tēr- -ēs-* being one grade of the formative suffix) which is wanting to the other cases; **ǵenos* (= Skr. *jánas* Gr. *γένος*) was distinguished as nom. acc. neut. partly by its *o* (the *os*-grade of the formative suffix), which at the same time showed that the form was a substantive, cp. Gr. *ψεῦδος* as contrasted with *ψευδές*. In this instance, as in so many others, a difference which arose naturally from the working of what we call the Laws of Sound has been turned to account in distinguishing varieties of usage. The same remark holds good for some of the words whose form was distinguished by a special inflexional suffix. To take an example: in **pəter-m̥* and **pəter-es* (= Skr. *pitár-am pitár-as* Gr. *πατέρ-α πατέρ-ες*), the acc. sing. and the nom. pl. were expressed partly by the inflexional suffix and partly by the ablaut-grade of the formative suffix *-ter-*, which distinguished them from other cases with *-tr- -tr̥- -tēr-*. In root-nouns, in the same way, this or that case was marked partly by ablaut-differences in the root-syllable (see II § 160 pp. 479 ff.). Cp. II § 7 pp. 15 f.

Thus it becomes clear that in treating of declension, case-suffixes are by no means all we have to do with. We must also take account the different shapes of the stem.

The chief relations of ablaut within the stems of words, so far as they affect declension — this we may call Case-Ablaut — have already been considered under the head of Stem-Formation. To this part of the Grammar we shall often have occasion to refer in what follows.

One special point must be mentioned. Forms which show strong-grade vocalism have been called Strong, and those with vocalism of the weak grade have been called Weak. On the same principle, we speak of Strong and Weak Cases; the Strong including the nom. acc. and voc. of all numbers (excepting the nom. and acc. sing. and du. neut., and perchance the acc. pl. masc. and fem. as well; see § 325), and the loc. sing.; while all the other cases are Weak.

But two cautions should be given.

1. This classification of the cases holds only for consonant-stems; e. g. Skr. *ukṣán-* Goth. *aúhsan-* 'ox', Skr. *pitár-* Gr. *πατέρ-* 'father'. It does not hold for stems in *u*, such as Skr. *sūnú-* 'son'.

2. It holds good primarily only for the proethnic stage of Indo-Germanic. Sanskrit has kept these old distinctions between the cases fairly well; but in the other languages form-association and re-formation have changed and effaced them to a great extent; compare, for example, Greek *πατέρων* for the older *πατρῶν*.

Remark. In Sanskrit grammar, the Weak cases are subdivided into Middle and Weakest, according as the case-suffix begins with a consonant or a sonant; e. g. instr. pl. *ukṣá-bhiš pitṛ́-bhiš* and instr. sing. *ukṣṇ-ā́ pitr-ā́*. Cp. I § 308 p. 245, §§ 311 f. pp. 247 ff.

Gender will of course be discussed in the following pages only in so far as it is expressed by peculiarities in the case-endings.

§ 186. One difficult question must not be entirely passed over in this place. How did the case-endings, as we are able to restore them for the end of the proethnic period, come to have the meaning which they had?

From the principles laid down in the first paragraphs of Volume II, we must assume that forms with a case-suffix, such as **eḱu̯o-s *eḱu̯o-m*, are compounds which once were phrases. What the final of each word of this kind actually was, before it became the sign of a case and the type after which new words could be formed at will, we have not the means of discovering by etymological research; the forms which have been trans-

mitted from the parent language as fully developed cases do not give enough evidence. Conjectures there are in plenty, not a few of them reasonable enough to deserve mention here; principles which can be seen in action during later times often throw light upon what must have happened in times gone by.

In those cases which expressed some relation in space, the inflexion may have been generally a demonstrative with some local meaning.

With regard to the *-m* of the acc. sing. (**ek̑u̯o-m*), we must remember that neuter forms which have it (as **jugo-m*) serve for the nominative as well. Thus *-m* can hardly have had a proper accusative meaning to begin with. We may conjecture that *-m* was first used with *o*-stems only; that where an *o*-stem could have a form in *-s* (such as **ek̑u̯o-s*), the *m*-form came to be contrasted with this in some vague indeterminate way, its meaning being narrowed to that of an accusative case; and that afterwards *-m* was regarded as an accusative-suffix proper, and used as such with other classes of stems. It is tempting to identify this with the particle *-m* which appears in so many Cases, especially in pronominal forms (as Skr. *ahám* 'ego' *mā́m* 'me'). See Gaedicke, Der Acc. in Veda, 17 [1]); Leskien, Ber. der sächs. Ges. der Wiss. 1884, p. 101; Torp, Beitr. zur Lehre von den geschlechtl. Pron. 1888, p. 23.

Remark. In a similar way, the nominative *-s* became a sign of the masculine. It certainly had nothing to do originally with the contrasting of masculine and feminine, but was used indifferently with either; then in the class of *o*-stems it was brought into contrast with the feminine, because words of that class had corresponding feminines without *s* ending in *-ā* and *-ī* (**ek̑u̯o-s* 'horse': **ek̑u̯ā*, and **u̯l̥qo-s* 'wolf': **u̯l̥qī*). It is clear that to the Greeks *s* denoted the masculine, because they added *-ς* to old feminine nominatives, such as **νεᾱνιᾱ* ('youth') when they were used to designate male persons, as *νεᾱνίᾱς* (§ 190 p. 67). Here *-s* came to denote the masculine gender, as we are supposing that *-m* came to denote the accusative case, and the masc. *νεᾱνίᾱς* bore the same relation to the 'feminine' *πόρτι-ς πόρι-ς ναῦ-ς* as the acc. *ἵππο-ν* to the 'nominative' *ζυγό-ν*.

The *-i̯* of the nom. pl. **to-i̯* (= Gr. *το-ί* Skr. *té*) cannot

1) Gaedicke's suggestion for the origin of this *-m* (p. 18) seems to me improbable.

be separated from the -*i̯*- which precedes so many plural case-suffixes (Gr. *το-ῖ-σι* Skr. *tḗ-ṣu*, Goth. *þá-i-m* O.C.Sl. *tě-mi* etc.). Thus it is an obvious conjecture that this -*i̯* was at first a sign of the plural, not of the nominative. J. Schmidt regards **toi̯* as arising from the juxta-position of the two pronominal stems *to*- and *i*-: 'this' + 'that' = 'these, the (pl.)' (Kuhn's Ztschr., XXV 6). If so, **ek̑u̯oi̯s(u)* (= Skr. *áśvēṣu* Gr. *ἵπποισι*, cp. O.C.Sl. *vlŭcĕchŭ*) and similar noun-forms were suggested by the analogy of the pronouns.

Another element with a plural meaning was *s*. This is most clearly seen in the *bh*-suffixes, as **-bhis* beside **-bhi*, **-bhos* beside **-bho*, Skr. *-bhyas* beside *-bhya* (*tú-bhya* 'tibi') and the *m*-suffixes which are connected with them. See §§ 367 and 379. It may be assumed without hesitation that this *s* is the same thing as the *-es* of the nominative plural (Gr. *πόδ-ες*). On the other hand, it is a question whether *-ns* in the accusative plural has this *s* or not (§ 325); *-ns* is usually looked upon as the acc. sing. *-m* made plural by adding *-s*, but it has not been explained why *-ms* was not kept, as it should have been, in Lithuanian and Prussian (cp. Lith. dial. *vilkuns* Pruss. *deiwans*) [1]. We may follow Torp in regarding the *s* of the Sanskrit pronouns *nas*, *vas* etc. as the same plural suffix (see § 436).

In several of the dual cases, *u* is found (e. g. Skr. *vṛ́kāu* beside *vṛ́kā*). This may be regarded as having been an independent word meaning 'both, two'. See § 285.

It has often been conjectured that *bh* in the *bh*-suffixes above mentioned was something of the nature of a formative suffix. It may be worth while comparing a similar change in Middle High German, where in the gen. dat. sing. *herzen* (nom. acc. *herze*) the *-en*, which was originally a formative suffix (II § 114 p. 356), was changed to a case-ending. This *bh*- has been compared with the suffix *-bho*- treated in II § 78 pp. 216 ff. But considering *ἀμ-φί* beside *ἄμ-φω*, whose second part cannot

1) The Prussian ending *-mans* for **-mam-s* (if this analysis is right) cannot be brought in evidence, since there are special circumstances in the case. See § 367.

be separated from Goth. *bái* 'both', and remembering that *bh*- belonged specially to the suffix of the instrumental (sociative, comitative), we are forced to ask whether the dual **bhōu̯ *bhō* and these *bh*-suffixes should not all be derived from a root which had the sense of being paired or together. Cp. § 274.

Within the separate languages, adverbial words (postpositions and the like) often coalesced with fully formed cases so completely that they were absorbed into the case-ending. Examples are: Avest. loc. pl. *vehrkaęšv-a* § 356, Gr. *Ἀθήναζε* i. e. *Ἀθηναζ-δε* § 327, Lith. *tamim-pi* § 423, Goth. *mi-k* § 442. These processes, which are perfectly easy to recognise, support the following assumptions. (1) An adverb *-e*, perhaps connected with the Skr. postposition *ā́*, is to be seen in Skr. dat. *vṛ́kāy-a* and in the loc. Lith. *rañkoj-e rañkos-e* O.C.Sl. *kamen-e*, see §§ 246, 257, 264, 356. — (2) *-su* and *-si* in the loc. pl., e. g. Skr. *vṛ́kēṣu* Gr. *λύκοισι*, are merely the loc. pl. *-s* with the particles *u* and *i* affixed to it, see § 356. — (3) There are similar affixes in the nom. sing. Osc. *poi* 'qui' Lat. *quī* (ground-form **qo-i̯*) and O.Pers. *hauw* Gr. *οὗ-(το-ς)* (ground-form **so-u̯*), see §§ 414 and 415. — (4) A particle **em *om *-m* was attracted to certain fully formed cases. This was most frequent amongst the pronouns, and was not confined to one case. Examples are: loc. sing. Skr. *áśvāyām* (§ 264), instr. sing. O.C.Sl. *rąką* (§ 276), instr. etc. Gr. *θεό-φιν* (§ 281), dat. instr. du. Skr. *vṛ́kā-bhyām* O.Ir. *dib n-* (§ 296), nom. Skr. *ahám* O.C.Sl. *azŭ* (§ 439) Skr. *vay-ám* (§ 441), acc. Skr. *mā́m* O.C.Sl. *mę* (§ 442). On page 60 we saw that it was natural to identify with this particle the *-m* of acc. nom. Skr. *yugá-m* Lat. *jugu-m*.

Where an Indo-Germanic case shows no accretion of any kind in the form of a suffix, as **ekṷā* (§ 185 p. 57), we have no right whatever to assume that a suffix has dropped off.[1]) The cases of nouns sprang up when these were used in phrases along with other words. But it was not always necessary that the

1) The vocative singular of course had no suffix. This is implied in what was said in § 184, p. 56.

relation of a noun to its sentence should be definitely expressed. Sometimes it was clear from the context without further aid, and then the stem, as we call it, could appear alone. The more generally case-suffixes joined themselves to words by composition, the more sharply defined became the use of forms without any suffix; and in the end they became cases as clearly marked as those which had a suffix, this result being possibly hastened by their having special grades of ablaut (as **pətēr* Gr. *πατήρ*).

It may sometimes, however, be the case that what appear to be forms without proper case-suffixes are only so in appearance. In Modern High German, certain names of places, such as *Baden, Bergen, Hohenbuchen* and *Unterwalden* are really dative forms, the case-suffix *-n* having been carried back to the nominative and retained in other cases as though it belonged to the stem. Something of this kind may have happened with the suffixless locatives in *-en -u̯en -men* (Skr. *mūrdhán* etc.). These may really contain a case-suffix *-n* (*-en* or the like) with a locative meaning; then the original stems will have been some shorter form (Gr. *αἰέν* being related to *αἰϝο-* in much the same way as *οἴκει* to *οἰκο-*), these forms, really locatives, having been made the foundation of the other cases. Similarly, the *-r* of Skr. *uṣar* 'in the morning', and the other forms of that kind, may have been a locative-suffix which eventually became part of the stem, as it is in Skr. gen. *uṣr-ás* Gr. loc. *ἦρ-ι* etc. See Johansson, Bezz. Beitr. XIV 164 ff., and Bartholomae, *ibid.* XV 14 ff. and 25 ff.

§ **187.** The case-endings of Masculine and Feminine Pronouns were in the parent language different from the corresponding endings of the noun; cp. e. g. nom. acc. neut. **to-d* (= Skr. *tá-d* Gr. *τό*) and nom. acc. neut. **neu̯o-m* (= Skr. *náva-m* Lat. *novo-m*). These two systems of cases, the Noun and the Pronoun, influenced each other in the proethnic period; and all through the subsequent history of the languages analogical re-adjustments of this kind have gone on in a greater or less degree.

Thus there was a distinction between the declension of

noun and pronoun; but still greater was the distinction between personal pronouns and nouns. In tracing the history of separate languages, it may often be seen that case-endings pass from nouns, and from pronouns masculine and feminine, to personal pronouns; but the reverse is hardly to be found.

In the present division of this work, which deals with the formation of the cases of nouns, reference will be made to pronouns so far as their cases influenced those of nouns by analogy. Secondly, where in any case-form there was no original difference between noun and pronoun, the pronominal form is cited wherever a particular language has kept the original ending in a pronoun only, or where the original ending is seen to best advantage in a pronoun because it may have suffered less from phonetic change (e. g. Goth. *þō* beside *juka*, § 338).

§ **188.** The Functions of more than one case were often attached to one form. Thus in the proethnic language itself, there was in most classes of stems a single form for the genitive and ablative singular, as Skr. *nāv-ás* Gr. *νη-ός* 'of a ship' and 'from a ship'; and in all stems only one form for the dative and ablative plural, as Skr. *nāu-bhyás* Lat. *nāv-ibus* 'to ships' and 'from ships'; perhaps *o*-stems had no more than one form for the genitive and locative singular, as Lat. *bellī* (§ 239). This multiplicity of functions was especially common in personal pronouns, as we shall see.

In later periods this often came about by what is termed syncretism; several different case-forms, each with its own meaning, are replaced by one, which unites the meanings of them all. Thus the case which in Greek grammar is called the dative includes the meanings of dative, locative, and instrumental; but the forms which are classed as datives in Greek are some of them genuine datives, as *οἴκῳ*, some locatives, as *νη-ϊ*, *ναυ-σί* (*οἴκοι* in N.W. Greek, Boeotian, etc.), and some instrumental forms, as *οἴκοις*. Thus certain dative forms served as locative and instrumental, certain locatives as dative and instrumental, and certain instrumentals as dative and locative, each over and above its own proper sense. Similarly in Latin,

the case which is called ablative combined the meanings of ablative, locative, and instrumental; whilst the forms classed as ablative were some of them, as *equō(d)*, true ablatives, some locative and instrumental forms, as *homin-e*. The origin of these syncretic or mixed cases lies almost entirely in the accidents of usage; we shall accordingly leave to the Syntax a detailed discussion of syncretic cases and kindred questions. But looking at the cases historically we must begin with the Indo-Germanic case-system, and discuss each form in the separate languages with reference to this. Thus we call Greek *νη-ΐ* 'locative', although the same form served as dative and instrumental besides.

As the singular form Skr. *nāv-ás* Gr. *νη-ός* was both genitive and ablative in the proethnic language, so there were instrumentals in *-bhi*, as Gr. *ναῦ-φι*, which served alike for singular and plural, both then and later; see §§ 274, 281, 379. The nom. acc. neut. too, in the proethnic stage, seems often to have had the same formation for singular and plural; see §§ 223, 337, 340, 342.

§ 189. The subject of Case Formation is not confined to cases proper, but includes adverbs as well. The history of Adverbs in their special uses will be set forth in the Syntax. We are here concerned with their form; and we shall discuss them after the following fashion.

There are two classes of adverbial words. One consists of words which once were ordinary cases, but became isolated and thus crystallised; as Gr. *Ἀθήνησι, οἴκοι, ἅμα, τοί*, Lat. *meritō*, *modo*, *bene*, *facile*, *multum*. Sometimes these are the sole evidence for a case-formation in some language or dialect; thus in Greek the old ablative in *-ōd* only survives in crystallised adverbial forms (§ 241). Then, but not otherwise, do they concern us here. The second class embraces words which never belonged to a regular paradigm; they were isolated words, used in such phrases as their meaning suited, but having no more than one or two other words at most connected with them closely enough to form such a grammatical group as we call a Paradigm. Most of them were built up on some pronominal

stem, as Gr. ἐν-τός ἐκ-τός, Lat. *in-tus*, Skr. *kú-tas*. However, these were often associated in meaning with the cases of certain complete systems, and raised to the rank of true cases; thus this same *-*tos* became a widely used abl.-gen. suffix in Sanskrit, Armenian, and Greek (§ 244). The suffixes of adverbs of this second class are accordingly included in the discussion which here follows, so far as they were in this way attached to any case-system.

This part of our subject also includes Infinitives. We shall see in the Syntax how these forms, originally living cases, came to be used as they are. Here Infinitives belonging to any of the separate languages must be cited at least when they represent cases which have dropped out of living use in that particular language, as Gr. δόμεν-αι (§§ 245, 251) and δόμεν (§§ 256, 257).

THE CASES.[1])

Nominative Singular Masculine and Feminine.[2])

§ **190.** I. Stems without any Case-suffix used as Nom. Sing. Masc. and Fem.

1. *ā*-stems. Pr.Idg. **ekuā* 'mare'. Skr. *áśvā* 'mare'; Avest. *haęna* O.Pers. *hainā* 'hostile host'. Gr. χώρᾱ 'land'. Lat. *equa*; Umbr. muta mutu 'multa', Osc. *tovto* 'civitas' (I § 105 pp. 98 f.,

1) One or two kinds of Indo-Germanic inflexion — e. g. that represented by Skr. (*dhíya-*)*dhās*, dat. *-dh-ē* — are themselves rare, and teach us nothing of the case-suffixes which cannot be learnt from the others. To avoid excessive detail, I have either passed these over entirely, or only just touched upon them by the way.

In order to present before the student a complete paradigm of the cases of a given word, it has often been necessary to fill up gaps in the tradition by making certain forms after the analogy of other words. In a work like the present, I hold this to be not merely allowable but necessary.

2) C. Maass, Vocales in stirpium terminationibus positae nominum Ital. Graec., imprimis vero Germ. post quas potissimum consonantes in sing. nominativo perierint, Breslau 1873. The Author, Erstarrte Nominative, Curtius' Stud. IX 257 ff. J. Schmidt, Heteroklitische Nominative Sing. auf *-ās* in den ar. Sprachen, Kuhn's Ztschr. XXVI 401 ff. *Id.*, Idg. *ō* aus *ōi* in der Nominalflexion, with an Excursus: Zur Bildung des Nom. Sing., *ibid.* XXVII 369 ff. Osthoff, Der got. Nom. Sing. der männlichen *-ja*-Stämme, *ibid.* XXIII 89 f.

and § 655. 2 p. 502). O.Ir. *tuath* 'folk' (I § 657. 2 p. 507). Ogam inscr. *inigina* 'girl, daughter' = O.Ir. *ingen*; Gall. *Dēva*. Goth. *giba* 'gift', cp. *sō* 'that (f.), she' *áinō-hun* 'any one (f.)', (beside *áina*); O.H.G. *buoz* 'improvement' (cp. below), A.S. *ʒiefu* 'gift'. Lith. *rankà* O.C.Sl. *rąka* 'hand'; cp. Lith. *geró-ji* beside *gerà* 'bona' (I § 664. 3 p. 523).

Avestic. Forms in *-ē̥*, as *kainikē̥* 'girl, virgin' *ber'xdē̥* 'blessed' and Prussian forms in *-ai*, such as *mensai* 'flesh, meat' (Lith. *mėsà*) show a pronominal ending; see § 414. Compare also § 202.

Greek. Masculines like *νεᾱνίᾱ-ς* 'young man' *γενέτη-ς* 'begetter' were originally feminine, and received their *-ς* through being assimilated to such nominatives as *θεό-ς* (II § 79 pp. 229 f., § 80 pp. 239 f., § 157 p. 472); cp. the corresponding re-formation in the gen. sing., § 229. But the form without *-ς* remained in use as a vocative, as *Ἑρμείᾱ, αἰναρέτη,* cp. O.Ir. voc. pl. *firu* = **u̯irōs* beside nom. pl. *fir* = **u̯iroi̯* (§ 314). This suggests the simplest mode of explaining masculine nominatives in *-ā* like Boeot. *Καλλίᾱ, ὀλυμπιονίκᾱ* and Leucad. *Φιλοκλείδᾱ* (cp. Megar. *τοῦ Ἀραίᾱς*, § 229); these may be called vocatives used as nominatives. Cp. the Author, Gr. Gr.[2] p. 117, and J. Schmidt, Pluralbildung 354. As regards such feminines as *τόλμᾰ* 'daring' *μέριμνα* 'care', see the Author *op. cit.* p. 102. Masculine forms like *ἱππότᾰ* = *ἱππότης* 'charioteer' will be explained in § 202.

Some curious masculine nominatives have been preserved in Italic. These are Latin '*hosticapas*' ('hostium captor') and '*paricidas*' beside *scrība agricola* etc., and Oscan *Kaϝας* 'Caha' *Maρ*]*ας* 'Mara' Tanas 'Tana' beside Santia 'Xanthia, *Ξανθίας*'. The record is too scanty to enable us to decide whether these were imitations of the Greek forms in *-ᾱ-ς* or independent of them.

Old High German shows traces of a few, but only a few of these nominatives in Idg. *-ā*: e. g. *buoz*, *hwīl* 'while'; most of them, however, are abstracts in *-ungō-*, as *samanunc* 'assembly, gathering', cp. also *siu* 'this, that (f.), she' like Skr. *siyā́ syā́*. See I § 661. 1 and 2, pp. 516 ff. The common

forms in *-a*, as *geba* 'gift' *sipp(e)a* 'kinsman', are accusatives used as nominatives (§ 213).

§ **191.** 2. *ī- i̯ē-*stems[1]). Pr.Idg. **bhr̥ĝhn̥t-ī*, fem. of **bhr̥ĝhont-* 'projecting, exalted, high'. Skr. *br̥hatī́*, Avest. *barenti* 'ferens'. O.Ir. *Brigit* 'exalted lady' (= Skr. *br̥hatī́*), *inis* 'island', I § 657. 2 p. 507, cp. also *s-ī* 'ea' = O.H.G. *s-ī*. Goth. *frijōndi* 'friend (f.)'. A.S. *thiwi thiu* 'maid' = Goth. *þivi*, O.H.G. *herzohin* 'duchess' *wirtun wirtin* 'hostess' (II § 110 p. 339), cp. also O.H.G. *s-ī s-i* 'ea' (the latter, like Goth. *si*, shortened by being used in a position where it lost its accent). Lith. *vežantì* 'vehens' for **vežantī́* (cp. dial. *geresnỹ-ji* 'better (f.)'); O.C.Sl. *vezǫšti* 'vehens' instead of **vezǫti* (II § 110 p. 337).

Aryan. In Sanskrit, these stems occasionally followed the analogy of stems in *-ī- -i̯i̯-* (II § 109 p. 334): *vr̥kī́-š* 'she-wolf' *naptī́-š* 'grand-daughter, daughter'. Similarly in O.Pers. we have *harauvatiš* (i. e. *-ī-š*) 'Arachosia' as compared with Avest. *haraxwaiti* Skr. *sárasvatī*.

Greek has lost the forms in *-ī*. Those which actually occur have *-i̯α -ια*, as *φέρουσα* 'ferens' for **φεροντ-i̯α*, *πότν-ια* 'lady', *ἀλήθεια* 'truth' for **ἀλᾱθεσ-ια*; these I hold to be reformates following the accusatives in *-i̯αν -ιαν* § 216).

Remark. J. Schmidt (in Kuhn's Ztschr. XXVII 291 and 309, Pluralb. 59 f.) sees in the Greek *-i̯α -ια* the original ending of the nom. sing. of

1) The strong-grade form of the suffix of which *-ī-* was the weak grade in the Indo-Germanic declension is hard to determine, as I have already said (II § 109 p. 333), adding that *-i̯ē-* seemed to me the most probable. But in numerous instances *-i̯ā-* forms are found amongst the cases, — in Greek, Italic, Germanic, Balto-Slavonic, and possibly Keltic (gen. sing. *inse*, § 230); hence it is perhaps more correct to place the variation between *-i̯ē-* and *-i̯ā-* in the proethnic period. There is, however, another possibility. *-i̯ā-* as well as *-i̯ē-* might become *-ī-* in unaccented syllables, so that perhaps our *ī- i̯ē-*class is to be split up into two original classes. Then the *ī-*: *i̯ā-*class would be parallel to the *ĭ-*: *i̯o-*class (Lith. *mẽdis* gen. *mẽdžio*). But in that case we should have to postulate two distinct declensions in *-i̯ā-*, one varying between *-i̯ā-* and *-ī-*, the other having invariably *-i̯ā-*. I leave others to investigate these difficult questions more closely. Johansson has tried, but comes to no certain conclusion whatever (Kuhn's Ztschr. XXX 398 ff.).

these stems, and believes that the *-ī* of the other languages arose from a contraction of **-ia-*. Against this view, see my Gr. Gr.[2] p. 102, and Morph. Unt. V 58 f.

Such words as these were often associated with stems in *-i̯ā* (σοφίᾱ), and *-i̯α -ια* gave way to *-i̯ᾱ -ιᾱ*; e. g. ἑταίρᾱ 'companion' instead of ἕταιρα for *ἕταρ-i̯α, fem. of ἕταρο-ς, Att. ἀληθείᾱ (Ion. ἀληθείη) beside ἀλήθεια, and so on. Cp. in O.H.G. *herzohinna* instead of the older *herzohin* (see below).

Latin, too, has lost the *-ī*. In *faciē-s pauperiē-s*, *-i̯ē-* has spread from the other cases, and *-s* has been added through assimilation to *re-quiē-s diē-s rē-s*. *avia* (from *avo-s*) is perhaps like *māter-ia* beside *māter-iē-s* (cp. II § 109 p. 333, and the footnote on the last page). As regards the fem. *suāvi-s* (Skr. *svādv-ī́*) see II § 109 p. 334: was *suāvi-s* the result of a form **suāvĭm* for **su̯ādu̯īm* (cp. § 216)?

Germanic. O.H.G. *herzohinna* instead of *herzohin*, O.Sax. *thiwa* instead of *thiwi*, and similar forms were produced by an assimilation to the nominative of *i̯ā*-stems (as O.H.G. *sipp(e)a* = Goth. *sibja* 'kin', see § 190 p. 68).

Lith. *žẽmė* Lett. *ſeme* Pruss. *semmē* O. C. S l. *zemlja* 'earth' pr. Balt.-Slav. **žem-i̯ē* arose by the intrusion of *-i̯ē-* from the other cases.

§ **192.** 3. All polysyllabic *n*- and *r*-stems show the formative suffix in the 3rd or 4th (strong) grade, which contrasted the nominative with the other cases, and so connected the difference in ablaut with a difference in case; e. g. Gr. ποιμήν πατήρ as against ποιμέν-α πατέρ-α, and so on. We have to postulate even for the proethnic language pairs of forms, some ending in *-ḗn -ōn* and *-ḗr -ōr*, others simply in *-ḗ -ō* in both classes of stems. The cause assigned has been the varying conditions of sentence position, *-n* and *-r* being supposed to disappear before certain consonants. But this theory is far from certain, in spite of Meringer's arguments (Zeitschr. für österr. Gymn. 1888, p. 137), especially in view of Johansson's new theory of the origin of *n*-stems and some of those in *-r* (Bezz.

Beitr. XIV 163 ff.) which has been mentioned already on page 63 of this volume.

a. *n*-stems.

Forms in Idg. *-n*. Pr.Idg. **k̑(u)u̯ōn* 'dog'. Armen. *šun* 'dog' *akn* (gen. *akan*) 'eye' *anjn* (gen. *anjin* for **-en-os*) 'soul' I § 651. 1 p. 497). Gr. *κύων* 'dog' *ποιμήν* 'herdsman'. It is a question whether Lat. *pecten lien flāmen* are old *n*-nominatives or not; see II § 114 p. 352. O.H.G. *gomo* A.S. *ȝuma* m. 'man', and doubtless Norse Run. *Haringa* for **-ōn*; Goth. *tuggō* O.Icel. *tunga* f. 'tongue' for **-ōn* (Goth. *raþjō* = Lat. *ratiō*), O.H.G. *zunga* A.S. *tunȝe* f. for **-ēn* (I § 659. 5 p. 513, § 661. 4 p. 519, and II § 115 pp. 361 f.).[1]) Lith. dial. *szu̯n* (beside *szū̃*) 'dog' O.C.Sl. *kamy* 'stone' (I § 92 pp. 86 f., § 663. 1 p. 521, and § 665. 2 p. 524).

Forms without *-n*. Pr.Idg. **k̑(u)u̯ō* 'dog'. Skr. *śvā́ śúvā*[2]) Avest. *spā* 'dog', O.Pers. *xšayārša* 'Xerxes' (*xšaya-* 'ruler' and *aršan-* 'mas'). Dubious relics of this kind are seen in Gr. *εἰκώ ἀηδώ* beside *εἰκών* 'image' *ἀηδών* 'nightingale', and so forth; the genitives belonging to these nominatives, *εἰκοῦς ἀηδοῦς* etc., would then be ad-formates of the class *Λητώ Λητοῦς* (G. Meyer, Gr. Gr.[2] pp. 315 f.). Lat. *homō homo*, Umbr. karu 'pars' = Lat. *carō*, tribřišu i. e. **tri-prikiō* 'triplicitas' (abl. *tribrisine*).[3]) O.Ir.

1) Kluge (Paul's Grundr. I 366) equates O.H.G. *-a* A.S. *-e* with pr. Germ. **-ōn*, and O.H.G. *-o* A.S. *-a* with pr. Germ. **-ēn*, admitting at the same time that the phonetics of this are 'strange'. Possibly he was driven to postulate these changes by the acc. O.H.G. *geba* A.S. *ȝiefe*; for Osthoff's hypothesis that *-i̯ō-* had become *-i̯ē-* in proethnic Germanic — a hypothesis which offered a possible explanation of these forms (*sunt-ia* for **-i̯ō-n* and hence *geba*) — has too slight a foundation to build upon. I hope to settle the question of *geba ȝiefe* in a different way (§ 213), and so I am content with the equation O.H.G. *-a* A.S. *-e* = pr. Germ. **-ēn*, O.H.G. *-o* A.S. *-a* = pr. Germ. **-ōn*.

2) The accentuation of the Vedic *śúvā* du. *śúvānāu* (the texts have *śvā́ śvā́nāu* with the *udātta*) is to be restored not only on the authority of Gr. *κύων*, but from the accent of *śún-as śún-ē* etc., *śún-* being related to *śúvān-* as *yū́n-* to *yúvān-*. In both words the accent, which in the weak cases fell upon the suffix (orig. **śun-ás* like Gr. *κυν-ός*, and **yūn-ás*) was changed on the analogy of the strong cases.

3) See also the Author, Ber. der sächs. Ges. der Wiss., 1890, p. 207.

cū Mod.Cymr. *ci* 'dog' (for a disyllabic **kuō* through the intermediate stage of **kuū*), O.Ir. *esc-ung* 'eel' *air-mitiu* 'honour' = Lat. *mentiō* (I § 657. 2 and 3, p. 507); Gall. *Frontu Alingu.* Goth. *guma* 'man' should doubtless be derived from **gumē* (not **gumō*) on account of O.Icel. *gume gumi.* Lith. *szů* 'dog' *akmů* 'stone'.

In the following words we have re-formates in place of original **-i̯ō(n)* **-i̯ē(n)*, the suffix having been levelled down to the weak form of it: Skr. *arcī* (stem *arcín-* 'beaming') Avest. *kaini* (stem *kainin-* 'girl'), Gr. *δελφίν* (stem *δελφῖν-* 'bellyfish, dolphin'), Goth. *managei* (stem *managein-* 'crowd'). See II § 115 pp. 358 ff.

In several languages there were re-formations following the analogy of nominatives in *-s*. Avestic: e. g. *ver^eθra-jā* 'victorious' beside *-ja* = Skr. *vṛtra-hā* (note that an old nom. **-ghō-s* would necessarily have become **-γā*); cp. Bartholomae, Ar. Forsch. I 31, Handbuch § 215 Anm. 2, § 220. Greek: e. g. Lac. *ἄρσης* = *ἄρσην* 'male', *δελφίς* beside *δελφίν* (cp. II § 115 p. 359). Lat. *sanguīs* for **sanguins* 'instead of *sanguen.* Osc. úíttiuf 'usio, usus' and statíf 'statio, statua', for **-iōns* and **īns* according to II § 115 pp. 359 f. O.Ir. *āru* 'kidney' doubtless for **-ōns*, *menme* 'mens' for **-ens*; see II § 114 pp. 352 f., § 117 pp. 373 f. Similar re-formations of *r*-stems are described on the next page.

b. *r*-stems.

Forms in Idg. *-r*. Pr. Idg. **mātḗr* 'mother', **dṓtōr* 'giver'. Armen. *mair* 'mother'. Gr. *μήτηρ, δώτωρ.* Lat. *māter, soror dator*; Umbr. Iu-pater 'Juppiter' ař-fertur 'infertor, flamen', Osc. *censtur* 'censor'. O.Ir. *māthir* 'mother', *siur* 'sister' (I § 657. 6 p. 509). In Germanic, with **ēr-*, O.Icel. *moðer moðir*, and probably O.H.G. *muoter*; also Goth. *fadar* 'father' if Streitberg is right in holding that pr. Germ. *-ēr* became *-ar* in Gothic, as *-ēi̯ -ēu̯* became *-ai -au* (cp. § 263 Rem.).[1]) The explanation

1) Streitberg, D. germ. Compar. auf *-ōz-*, pp. 22 f. This law would enable us to explain Goth. adv. *þar* as compared with O.H.G. *dār*, unaccented *der*, as follows. Starting from pr. Germ. **þēr*, we should have

of Goth. *svistar* A.S. *sweostor* 'soror', Goth. *brōþar* A.S. *brōðor* O.H.G. *bruadar* 'brother' (Gr. φρᾱ́τωρ) is doubtful. These may have come from *-ōr*, or perhaps they were accusative or vocative forms; cp. II § 122 pp. 381 f.

Remark 1. In any case, A.S. *mōdor dohtor* O.Swed. *faþur mōþor* are re-formates. I take this opportunity to call attention to a question which appears to me to need more thorough investigation. How far did Idg. *-er-* in unaccented final syllables become *-ar-*; and where *-ar-* seems to correspond to Idg. *-er-*, ought we not sometimes to assume that it came from *-or-* (or *-ar-*)? See the Author, Curt. Stud. IX 374 and 378; Paul in his Beitr. VI 246 f. and 253 f.; J. Schmidt, Pluralb. 197 f.; Kluge, Paul's Grundr. I 361.

Forms without *-r*. Pr. Idg. **mātḗ*, **dŏtō*. Skr. *mātā́* Avest. *māta* 'mother', Skr. *bhrā́tā* O.Pers. *brātā* 'brother', Skr. *dātā́ dā́tā* Avest. *dāta* 'giver', Skr. *hantā́* 'murderer' O.Pers. *ja(n)tā* 'slayer, foe'. Lith. *motẽ mótė* 'woman, wife' *sesů̃* 'sister', O.C.Sl. *mati* 'mother'.

Remark 2. Joh. Schmidt and other scholars assume that *-r* was dropped in Balto-Slavonic (Schmidt, in Kuhn's Ztschr. XXV 22, Pluralbild. 193 f.). I am still unable to regard this as proved. Cp. I § 663 Rem. pp. 521 f.

Re-formation in the separate languages gave rise to Avest. *ātar-š* 'fire' (II § 122 p. 383), Gr. μάκαρ-ς instead of μάκᾱρ 'blessed'. There were similar re-formations in the *n*-stems, for which see last page.

§ 193. 4. Polysyllabic *s*-stems show in the formative suffix the same case-ablaut as do stems in *n* and *r*; but it would appear that in the proethnic speech the *-s* of the formative suffix was never missing. The ending in *s*-stems will then be *-ēs* as opposed to *-ēn -ē*, *ēr ē* in the others.

Pr. Idg. **dus-menēs* 'ill-disposed'. Skr. *durmanās* 'dejected, troubled', Avest. *dušmanā́* 'thinking evil', O.Pers. *aspacanā* (doubtless connected with Skr. *cánas-* n. 'pleasure'), Skr. *yaśás* 'glorious' (I § 649. 7 p. 496). Gr. δυσμενής 'ill-

Goth. *þar* (cp. also *jáinar aljar*) and O.H.G. *der* as equivalents. The form *þar* would then have driven the accented **þēr* from the field in Gothic. O.H.G. gen. *unsēr* follows *jenēr*, § 455.

disposed, hostile' ψευδής 'false, deceitful'. Lat. *pūbēs pūber*, *dē-gener* (with *-r* for *-s* from the other cases).

Pr. Idg. **āu̯sōs* 'dawn'. Skr. *uṣás*. Gr. Hom. ἠώς Att. ἕως. Lat. *honōs honor* (with *-r* from the other cases).

Pr. Idg. comp. **ōk̂(i)i̯ōs* 'quicker'. Avest. *āsyå*. Lat. *ōcior* (*-r* from the other cases). O.Ir. *siniu* 'older' *māo mō* 'larger'. For Skr. *áśīyāṣ áśīyān* instead of **áśīyās* and O.C.Sl. *slaždějĭ* 'sweeter' instead of **sladĭja*, see II § 135 p. 430.

Pr. Idg. part. perf. act. **u̯éi̯du̯ōs* or **u̯idu̯és* 'knowing'. Avest. *vīđvå*. Gr. εἰδώς. By re-formation, Skr. *vid-vā́s vid-vā́n* instead of **-vás*, Lith. *dã-vęs* 'having given' *mìr-ęs* 'dead' instead of *-*vés *-és* and O.C.Sl. *da-vŭ mĭr-ŭ* instead of **-va *-a* (or **-vĕ *-vi*, **-ĕ *-i*). Along with these the parent language seems to have had a nominative in **-us*: Skr. Ved. *vidúṣ* Avest. *vīđuš*, with which may be classed Osc. *sipus* 'sciens' and O.C.Sl. *mĭrŭ*. See II § 136 pp. 439 ff.

Remark. It remains doubtful whether the proethnic language had nominatives without *s* belonging to stems in dental explosives, as well as the above. See § 198 p. 79.

§ 194. II. Forms with *-s* as the sign of the Nominative.

1. *o*-stems. Pr. Idg. **u̯l̥qo-s* 'wolf'. Skr. *vṛ́ka-s*, Avest. *vehrkō* (*vehrkas-ca* 'lupusque'), O.Pers. *kāra* 'people, host' (see I § 556. 3 pp. 411 f., § 558. 4 p. 415, § 646. 3 pp. 490 f., and Bartholomae in Kuhn's Ztschr. XXIX 572 f.). Armen. *gail*, *mard* 'homo' = Skr. *mṛtá-s* (I § 651 p. 497). Gr. λύκο-ς. Lat. *lupu-s*; *equo-s*, *vir* for **vir(o)-s*, *satur* for **satur(o)-s*, *morti-fer* and *-feru-s* (the latter being a re-formate), *ager* for **agr(o)-s*; Umbr. pihaz 'piatus' Ikuvins 'Iguvinus', *ager* 'ager' katel 'catulus', Osc. húrz 'hortus' Púmpaiians 'Pompeianus', *famel* 'famulus'; see I § 655. 5 and 9, pp. 505 and 508 (the conditions of syncopation in Latin have not yet been properly made out, cp. *mors* for **mort(i)-s* and the like, § 195). O.Ir. *fer* 'man' for **u̯iro-s*, *aile* 'alius' for **ali(i̯)o-s* (I § 34 p. 34, § 139 Rem. p. 125, § 657. 3, 5 and 10, pp. 508 and 509 f.), Gall. *tarvo-s* 'bull', *Andecamulo-s*.

Goth. *vulf-s*, *vaír* 'man' for **u̯ir(a)-z*, O.H.G. *wolf*, *acchar* 'tilled land' = Goth. *akr-s* (I § 660. 6 p. 516[1]), § 661. 2 and 5, pp. 517 and 519), cp. also Goth. *hva-s* O.H.G. *hwe-r* *we-r* 'who?'; in the Salic Law *focla* = **fogla-(z)* 'bird', Norse Run. *daga-ʀ* 'day' = O.Icel. *dag-r* Goth. *dag-s*; Goth. *harji-s* 'host' for **harı̯a-z*, which became **hari-s* and took *j* afresh from the oblique cases (I § 660 Rem. 3 p. 515; Kauffmann, Paul-Braune's Beitr. XII 539; Streitberg *ibid.* XIV 181). Lith. *vĩlka-s*; for the loss of *-a-* in the last syllable, see I § 664. 2 pp. 522 f. On O.C.Sl. *vlŭkŭ*, see below.

Stems in *-i̯o-* sometimes made their nom. sing. in *-i-s -ī-s* (*-i- -ī-* are weak-grade forms of *-i̯o-*), and the corresponding acc. sing. masc. and neut. in *-i-m* (§§ 212, 227). O.Lat. *ali-s* *Cornēli-s* beside *aliu-s* *Cornēliu-s*, Osc. Pakis 'Pacius'. Goth. *un-nuts* 'useless' for **-nuti-z*, *haírdei-s* 'herdsman'; A.S. *secȝ* 'man' instead of pr. Germ. **saȝi-z*. Lith. *žõdi-s* 'word' *mõji-s* 'sign' *gaidỹ-s* 'cock' beside *vėja-s* 'wind' *svėczia-s* 'guest' and the like. We should doubtless class here O.C.Sl. *krajĭ* 'rim, edge', and *konjĭ* 'horse' instead of **konĭ*, the *n* having been softened (palatalised) on the analogy of the genitive and other cases. Cp. II § 63 p. 122, and Streitberg, as cited, 166 ff.

Remark 1. The student will observe that in Slavonic there is nothing to represent the nominative in **-i̯o-s* (as Lith. *vėja-s* Lat. *aliu-s*). This ending would regularly become **-i̯e*, which has the look of a vocative; and this is perhaps the reason for its absence. Cp. § 201 Rem. 2.

Remark 2. Perhaps such *i*-stems as Skr. *sā́rathi-ṣ* 'charioteer' Avest. *māzdayasni-š* 'belonging to the worshippers of Mazda' Lat. *decemjugi-s* (II § 93 p. 284) were originally *i̯o*-stems.

O.C.Sl. *vlŭkŭ* is an accusative form, which took the place of **vlŭko*. The nom. and acc. in *-i̯o-*, *-i-*, and *-u*-stems

1) Braune (Goth. Gr.[3] § 78 Anm. 2) has a different theory of the phonetic law affecting Goth. *vaír*. This view has recently received the support of W. Schulze (Kuhn's Ztschr. XXIX 271), who explains *stiur* as a dissyllable. But this explanation is unsupported by the evidence (see Osthoff Paul-Braune's Beitr. XIII 454 f.), and furthermore it is opposed by the form *fidvōr* for **fidvōr-(i)z* (§ 320), whilst *akrs*, which Braune himself holds to be dissyllabic (§ 27), should not have been brought in evidence at all. I therefore keep to may own explanation, as above cited.

came eventually to be the same, *-i-s and *-i-m becoming -ĭ, and *-u-s and *-u-m becoming -ŭ; and this appears to have caused the substitution of *vlŭkŭ* for **vlŭko*. There may have been another factor in the change. If the -o (standing doubtless for *-o-d*) which we find as the ending of the nom. acc. neut. of adjectival stems in -o- appeared in this language before the nom. sing. masc. *-o(s)* had given place to -ŭ, the nom. masc. and the nom. acc. neut. must both have come to end in -o; and the wish to keep the two genders distinct may have been an additional reason for substituting -ŭ for -o in the nom. masc.; cp. § 227. Another explanation of -ŭ, by no means convincing, is given by Kozlovskij in the Archiv für slav. Phil. X 657.

§ 195. 2. *i*-stems. Pr. Idg. **oṷi-s* 'sheep'. Skr. *ávi-ṣ*; Avest. *ažĭ-š* 'snake, dragon', O.Pers. *šiyāti-š* 'place of pleasure, dwelling-place' (= Lat. *quiēs*, gen. *quiētis*). Armen. *sirt* 'heart' = Lith. *szirdì-s*, *iž* 'viper' = Skr. *áhi-ṣ* (I § 651 p. 497). Gr. *ὄφι-ς* 'snake, dragon'. Lat. *ovi-s*, *turri-s*; *ācer* for **ācri-s*, and by the side of it a re-formate *ācri-s*, *mors* = Skr. *mṛti-ṣ* 'death' — this syncopation of -*i*- is common in the final syllables of *ti*-stems (its conditions have not been fully made out, nor have those of syncope in *o*-stems, as has been pointed out in § 194, p. 73); Umbr. *pacer* 'pacatus, propitius', Osc. *cevs* 'civis' aídil 'aedilis', see I § 33 pp. 33 f., § 633 pp. 472 f., § 655. 5 and 9, p. 503 and pp. 504 f. O.Ir. *fāith* 'vates' for **u̯āti-s* (I § 657. 5 and 10, pp. 508 ff.); Gall. *rati-s* 'fern' = Ir. *raith*. Goth. *anst-s* 'favour' *baúr* 'son' for **bur(i)-z* (like *vaír* § 194 p. 73), O.H.G. *anst* 'favour' *chumi* 'approach, coming' = Goth. *qum-s*, O.H.G. *wini* 'friend', but *Fridu-win Liob-win* (I § 660. 1 p. 514, § 661. 2 and 5, pp. 517 and 519); Norse Run. *gasti-R* 'guest' = O.Icel. *gest-r* Goth. *gast-s*. Lith. *naktì-s* O.C.Sl. *noštĭ* 'night' (I § 665. 4 p. 525).

Observe Skr. *vḗ-ṣ* 'bird' beside *ví-ṣ* Lat. *avi-s*, and these root-nouns of corresponding structure — Avest. *yao-š* 'leagued, confederate, friendly, allied' *gao-š* 'crying aloud'. And perhaps we should add Lat. *ei-s ī-s eis-dem* beside *ĭ-s* = Goth. *i-s*; see § 416.

§ **196.** 3. *u*-stems. Pr. Idg. **sŭnu-s* 'son'. Skr. *sūnú-ṣ*; Avest. *bāzu-š* 'arm', O.Pers. *kūrū-š* (read *kūruš*) 'Cyrus'. Armen. *zard* 'ornament', *marh* 'death' (II § 105 p. 319), see I § 651 p. 497. Gr. *πῆχυ-ς* 'lower arm' *ἡδύ-ς* 'sweet'. Lat. *manu-s*. O.Ir. *bith* 'world' (I § 657. 5 and 10, pp. 508 ff.); Gall. *Esu-s* (cp. *Esu-nertus*). Goth. *sunu-s*, O.H.G. *sunu suno*, *situ sito* 'custom' (= Goth. *sidu-s*), *fridu frido* 'peace', without *-u* or *-o* *Sigi-frid*, *hand* 'hand' (= Goth. *handu-s*), cp. the *i*-stems § 195. Lith. *sūnù-s* 'son' *saldù-s* 'sweet', O.C.Sl. *synŭ* 'son' (I § 665. 4 p. 525).

In Iranian there are by-forms in *-āu-š* (with corresponding acc. sing. *-āvam* and nom. acc. pl. *-āvas*), such as Avest. *bāzāu-š*, O.Pers. *dahyāu-š* 'neighbourhood'; these we may conjecture to be re-formates containing the loc. sing. in *-āu*; see § 261. For Avest. *per^{e}nāyu* beside *per^{e}nāyu-š* and the like, see Bartholomae Ar. Forsch. I 36 and J. Schmidt Pluralbild. 76 ff.

§ **197.** 4. *ū- uu̯-* and *ī- ii̯-* stems (cp. II § 109 p. 334). Pr. Idg. **bhrū-s* 'eyebrow' **su̯ek̑rū-s* 'socrus'. Skr. *bhrū́-ṣ*, *śvaśrū́-ṣ*, *tanū́-ṣ* 'body', *dhī́-ṣ* 'thought', *nadī́-ṣ* 'river'; Avest. *ber^{e}zai-ðī-š* (acc. *-ðī-m*) 'having great insight'. Gr. *ὀφρῦ-ς*, *νέκῡ-ς* 'corpse', *κῖ-ς* 'weevil', *πόλῑ-ς* 'city'. Lat. *sū-s*, *vī-s*; *socru-s* has become a *u*-stem, because stems in *-ū-* and those in *-u-* had the same endings in the acc. gen. and dat. singular (§§ 217, 233, 254). O.Icel. *sȳ-r* O.H.G. *sū* 'sow' (I § 661. 5 p. 519); polysyllables are treated as *u*-stems, O.H.G. *swigar* 'socrus' (also *swiger* following *muoter*), Goth. *asilu-qaírnu-s* f. '*μύλος ὀνικός*, millstone' O.H.G. *quirn* as contrasted with O.C.Sl. *žrŭny* f. 'mill'. O.Pol. *kry* Mod.Slov. *kri* 'blood' = O.C.Sl. **kry* (whose place was taken by *krŭv-ĭ*), O.C.Sl. *svekry* (I § 665. 4 p. 525).

Nominatives formed in the same way from stems in *-ḡ̑-* *-ṇn-*, *-l̥-* *-ḷl-*, and *-r̥-* *-ṛr-* (I § 312 pp. 250 f., II § 160 pp. 485 f.). Skr. *já-s* 'being' for **ǵṇ̑-s*, *gō-ṣá-s* 'winning cattle', Avest. *xᵃ̊* 'spring, source' (cp. acc. Ved. *khám* § 217), Skr. *pū́r* 'stronghold' for **pl̥-s*, *gī́r* 'praise' for **gr̥-s*. No doubt Gr. *ὠμο-βρώς*, *χρώς* are further examples.

§ 198. 5. Stems whose suffix ends in an explosive.

a. The Suffixes *-t- -tāt- -tūt-*. Skr. *viśva-jí-t* 'gaining everything by victory' *sarvá-tāt* 'completeness' (I § 647. 7 pp. 493 f.), Avest. *haurva-tās* 'wholeness, a being in good condition (I § 473. 2 p. 349). Gr. *θής* 'hired labourer' for **θη-τ-ς*, *νύ-ξ* 'night' for **νυκ-τ-ς*, *ὁλό-της* 'wholeness, completeness'. Lat. *com-es* (gen. *com-i-t-is*) *nox* (gen. *noc-t-is*), *novi-tās*, *juven-tūs*. O.Ir. *cing* (gen. *cinged*) 'hero, warrior' = Gall. **Cinges* (stem *Cinget-*), O.Ir. *ōitiu* 'youth' for **(i̯)ovētū(s)* = Lat. *juventūs*.

In Germanic, such forms as Goth. *naht-s* 'night' *mēnōþs* 'month' O.H.G. *naht mānōd* are re-formates, since *-ts* became *-ss (-s)* in proethnic Germanic (I § 527 p. 382). They may have been due to an attempt to restore the stem, which had been preserved in the other cases; cp. Goth. instr. pl. *frijōnd-am* beside *tigum*, § 379. As regards nominatives like O.H.G. *nefo* for **nefō(đ)*, see p. 79.

The Suffix *-nt-*. Pr. Idg. *-nt-s*, *-n̥t-s*[1]), as **bhr̥ĝhont-s*, possibly **bhr̥ĝhent-s* (see II § 125 Rem. 2 pp. 395 f.) 'prominent high'. Skr. *br̥hán* Avest. *ber^{e}zą̄s* (I § 647. 7 pp. 493 f.; Bartholomae, Kuhn's Ztschr. XXIX 501 ff. and 517); Skr. *dádat* 'giving' for **dadat-s* Avest. *stavas* 'praising' for **stavat-s*. Gr. *ἄεις* 'blowing' = Skr. *vā́n*, common ground-form **u̯ēnt-s*, *ὀδούς* 'tooth'; as to *-ων* in *φέρων* and the like, see below. Lat. *ferēns*, *dēns*, *stāns* = Gr. *στᾱ́ς*; Umbr. zeřef *serse* 'sedens' (I § 655. 9 p. 504). O.Ir. *care cara* 'friend' (gen. *carat*), cp. *tri-cha* 'group of 30' (gen. *tri-chat*) = Avest. *þri-są̄s* (I § 657. 10 pp. 509 f.). Lith. *vežą̄s* 'vehens' dial. *vežans vežus*, Pruss. *sīdans sīdons* 'sitting'; O.C.Sl. *vezy* 'vehens', in the first instance for **vezuns*, according to I § 84 p. 80, § 92 pp. 86 f., § 219 pp. 186 f.

In Sanskrit, *íyān* 'tantus' *kíyān* 'quantus' are re-formates which followed certain words of kindred meaning, such as *tvā́-*

1) An error must be corrected in II § 125, p. 395. In that place, following the traditional view, I wrongly allowed myself to regard **-ōn* as an original nominative ending as well as **-o-nts*. This correction I have already made in my Greek Grammar[2] p. 109.

-vān 'one who is as thou art' (see below). In Avestic participles, besides *-ąs* (**-ants*) and *-as* (**-ats*), we find *-ō* = Ar. **-as*, which is the commonest ending of such participles as concern us here; e. g. *per^{e}sō* 'asking' *hištō* 'standing'. Bartholomae (Kuhn's Ztschr. XXIX 557 ff.) considers this formation in the light of Vedic forms like *pra-mṛṇá-s* beside *pra-mṛṇán* 'destroying' *viśvam-invá-s* 'penetrating everything' beside *ínvan*, and assumes that a certain number of adjectival compounds in Idg. **-ó-s*, used like participles, were brought into close relation with the corresponding verbs, the result being that true participles in *-nt-* took the ending of these adjectives through association with them. The analogy seems to have gone further; and, in Avestic, nominatives in *-vō* were formed even from stems in *-vant-*, as *par^{e}na-vō* 'furnished with a feather' (see Geldner, Kuhn's Ztschr. XXX 515).

Greek has forms like *φέρων* 'bearing' *ἰδών* 'seeing', besides those in *-ούς* (for **-οντ-ς*). Now *-ων* can come neither from **-ont-s* or **-ōnt-s* nor from **-ōnt*, and for **-ōn* as an Idg. ending in *nt*-stems there is no further evidence that can be trusted.[1]) I therefore offer the following conjecture as to its origin. I suggest that there were two influences at work. (1) The relation of the masc. *ἴδμων πίων*, and similar forms, to the neuter in *-ον*, *ἴδμον πῖον*, caused a masc. *-ων* to spring up in connexion with *-ον* (for **-οντ*), beginning with participles used strictly as nouns, e. g. *μέλλων* 'future' *ἑκών* 'willing'. (2) The relation of the vocative to the nominative in *κύων δαίμων* and the like, voc. *κύον δαῖμον*, gave rise to substantival nominatives like *γέρων* (voc. *γέρον* for **-οντ*).

In Germanic, forms like Goth. *frijōnd-s* O.H.G. *friunt* 'friend' are re-formates of the same kind as Goth. *mēnōþs* O.H.G. *mānōd*; see last page. Similarly, Pruss. *dīlant-s* 'working' and Lett. *áugůt-s* 'growing', for **-ant(i)-s*.

The Suffix *-u̯ent-*. Skr. *tvā́-vāṣ -vān* Avest. *þwā-vāṣ* 'one like thee', Skr. *áma-vāṣ -rān* 'pressing on mightily, powerful' for

1) Lith. *sėdun* and Lett. *sėdu* (J. Schmidt, Kuhn's Ztschr. XXVII 392) cannot be quoted as proving that Idg. had this ending.

*-*vāns*, but Avest. *ama-vå* for *-*vās*. Pr. Ar. *-*vāns* in *tvā--vāns*, we may conjecture, took the place of *-*vās* under the influence of *-vant-am -vant-as*; but pr. Ar. *-*u̯ās*, which was preserved in Avest. *ama-vå*, belongs to the suffix *-u̯es- -u̯os-*. Cp. II § 127 p. 405, § 136 p. 441, § 208. Gr. *στονό-εις* 'wailing, lamentable' for *-*ϝεντ-ς*.

Remark 1. Bartholomae (Kuhn's Ztschr. XXIX 499 ff., 518 f.) postulates Idg. *-*u̯ēnt-s*; in which I cannot follow him. It may be remarked in passing that, granted pr. Ar. nom. *-*vās*, the change of *-vant-* to *-van-* stems (Skr. *r̥k-vant-* and *r̥k-van-* 'singing' Avest. *ama-vant-* and *ama-van-*, and so forth) is more easily explained than it is on Bartholomae's theory, pp. 540 f.: *-vās* had another form *-vā*, its sentence doublet, and this resembled the ending of stems in *-van-* (§ 391). Cp. the reverse process in Ved. *varimát-ā* from the nom. *varimā́* (stem *varimán-*) 'width, distance'.

Suffixes in *-d*, pr. Idg. nominative ending *-ts*. Skr. *śarát* 'autumn', stem *śarad-*. Gr. *φυγάς* 'fugitive', stem *φυγαδ-*, *ἀσπίς* 'shield', stem *ἀσπιδ-*. Lat. *lapis*, stem *lapid-*, *palūs* stem *palūd-*.

All these examples ended in pr. Idg. *-ts*. But we have also certain forms, especially in Germanic, which seem unquestionably to point to a proethnic nominative singular without *s*. Such are Goth. *mēna* O.H.G. *māno*, and doubtless Lith. *mĕnů* for **mēnōt* beside Goth. *mēnōþ-s* O.H.G. *mānōd* (II § 123 pp. 393 f.), O.H.G. *nefo* for pr. Germ. **néfōđ* beside Lat. *nepōs* (see *loc. cit.*), A.S. *hæle* for pr. Germ. **χalēþ* beside *hæleđ* (*loc. cit.*), O.H.G. *zan* 'tooth' for pr. Germ. **tanþ* (in I § 527 p. 382 erroneously traced back to pr. Germ. **tan(t)-s*) beside Skr. *dán* Gr. *ὀδούς*. Other examples are given by Kluge, Paul's Grundr. I 390 f. Here there are two possibilities between which I do not feel able to decide at present. There may have been double forms from the very first, one with *s* and one without; this view may be supported by the ablaut in **χalēþ* (in consideration of this, Kluge *op. cit.* p. 385 even postulates an Idg. nom. **pōd* beside acc. **pod-m̥*). Or *s* may have disappeared when the words were used in this or that environment in the sentence (cp. the disappearance of *s* in such sound-groups as *st-*, I § 589. 3 pp. 445 f., § 645 p. 490). And compare Bartholomae, Stud. zur idg. Sprachgeschichte, I 65.

Remark 2. If *-u* in O.H.G. *hwemu* is the direct and regular representative of pr. Germ. **-ōt* = Idg. **-ōd* (§ 241), the *-o* of *māno nefo* must have arisen by an assimilation of these words to the nominative ending of *n*-stems, such as *gomo*.

b. Suffixes in *-k* and *-g*. Skr. *uśík-* (stem *uśíj-*) 'demanding', Avest. *usixš* (stem *usij-*) a kind of demon; for Skr. *spáṭ* 'spy' and the like see I § 401 Rem. 2 p. 297, § 404 Rem. 3 p. 299. Gr. *μεῖραξ* (stem *μειρακ-*) 'girl' *φάλαγξ* (stem *φαλαγγ-*) 'phalanx'. Lat. *senex* (stem *senec-*) *bibāx* (stem *bibāc-*). O.Ir. *aire* 'princeps' for **ariak-s*, gen. *airech*, *ail* 'rock, stone' for **alek-s*, gen. *ailech*, *nathir* 'water-snake' gen. *nathrach*; Gall. *esox* = Mid.Ir. *eu* (gen. *iach*) 'salmon' (I § 657. 10 pp. 509 f.).

§ 199. 6. Perhaps all Root-Nouns had *-s* in the proethnic language (cp. § 197). Examples:

Pr. Idg. **nāu̯-s* 'navis': Skr. *nāú-ṣ* Gr. *ναῦ-ς*. **d(i)i̯ēu̯-s* 'heaven, daylight': Skr. *d(i)yāú-ṣ*, Gr. *Ζεύ-ς*, O.H.G. *Zio* for **t(i)eu̯(z)* (Streitberg, Die germ. Comp. auf *-ōz-*, 18). **gōu̯-s* 'ox, cow': Skr. *gāú-ṣ* Avest. *gāu-š*, Gr. *βοῦ-ς*, O.Ir. *bō* (I § 657. 10 pp. 509 f.). I leave it an open question whether Gr. *Ζῆς*, Lat. *diēs* and Gr. Dor. *βῶς*, Lat. *bōs* O.H.G. *kuo* O.Sax. *kō* [1]) were framed on the model of the acc. sing. (§ 221), or whether they represent proethnic sentence doublets **d(i)i̯ēs* and **gōs*. See II § 160 p. 481 f., and Streitberg *op. cit.* 12. In composition we have Skr. *-gu-ṣ*, as *su-gú-ṣ* 'having fine cattle', inflected as a *u*-stem, e. g. nom. pl. *su-gávas* du. *su-gū́*.

**u̯ōq-s* 'voice, speech': Skr. *vā́k* Avest. *vāx-š*, Gr. *ὄψ*, Lat. *vōx*. **rēk̑-s* (√*rēĝ-*) 'ruler, king': Skr. *rā́ṭ* (like *spáṭ* § 198), Lat. *rēx* O.Ir. *rī* (gen. *rīg*, Gall. nom. *Dumno-rīx*); Goth. *reik-s* (nom. pl. *reik-s*) instead of **reihs* (I § 527 p. 381) is doubtless borrowed from the Keltic. Avest. *bar^{e}š* 'height, high' (gen. *bar^{e}z-ō ber^{e}z-ō*), O.Ir. *brī* (gen. *breg*) 'mountain', Goth. *baúrg-s* 'stronghold, fort, town' (gen. *baúrg-s*) instead of the regular **baúrhs*, from √*bherĝh-*. Skr. *ápān* Avest. *apąš*

1) A.S. *cū* O.Icel. *kýr* must be added to this list, if in these *ū* stands for *u̯o*. But cp. II § 160 p. 482.

for pr. Ar. **apānk-š* 'turned backwards' (I § 647. 7 pp. 493 f.; Bartholomae, Kuhn's Ztschr. XXIX 501 ff. und 517 f.). Avest. *āf-š* (stem *ap-*) 'water', Skr. *stúp* (stem *stubh-*) 'roaring'.

We may doubtless add **mūs-s* 'mouse', which became **mūs* in the proethnic stage (§ 356 Rem.): Gr. *μῦς* Lat. *mūs* (II § 160 p. 485).

The Greek *χθών* 'earth' (cp. Skr. *kšā́-s*, II § 160 p. 482) may be an ad-formate of *τρῡγών* and the like; *χᾶν χήν* 'goose' and *μήν* 'month' are undoubtedly re-formates, taking the place of **χανς *χᾶς* and Ion. etc. *μείς* for **μηνς* respectively (II § 132 p. 415, § 160 p. 485); similarly *φώρ* 'thief' *χήρ* 'hedgehog' on the analogy of *δώτωρ δοτήρ* etc.

For the ground-form of Skr. *pā́t* Gr. Dor. *πῶς πός* (Hom. *τρί-πος*) Att. *πούς* Lat. *pēs* 'foot', see § 198 p. 79: were there once parallel forms **pōd* (**pēd*) and **pot-s* (**pet-s*)? *ου* in *πούς* has not yet been satisfactorily explained.

Vocative Singular Masculine and Feminine.[1])

§ 200. No special vocative forms are found in the Indo-Germanic languages except for singular nouns masculine or feminine. From the proethnic period onwards, the nominative has served for the vocative in the plural and dual, whilst in the neuter gender the form used for nominative and accusative has been used for the vocative in all three numbers.

Genuine singular vocatives naturally enough had no case-sign at all; see § 184 p. 56. In the proethnic language the accent was thrown back to the first syllable of the word, as **máter* 'mother' = Skr. *mā́tar* Gr. *μῆτερ*; this remains a general rule in Sanskrit, but in no other language. But the forms had a word accent of their own only when they stood first in a clause. In any other position it is probable that they were often enclitic, which is the rule in Sanskrit; e. g.

1) Benfey, Über die Entstehung des indogerm. Vocativs, Abhandl. der Ges. der Wiss. zu Gött. XVII (1872) pp. 3 ff. Bezzenberger, Zur lett. Declination: Einige Vocativformen; in his Beiträge, XV, 296 ff.

idám indra šṛṇuhi 'Hear this, Indra!' See I § 669 p. 534, and § 672 p. 538.

In all other branches of the language but the Aryan this practice of accenting the first syllable underwent many changes. Sometimes it was overborne by special rules in special languages. Thus in Greek and Latin certain changes were necessary in order that words should conform to the trisyllabic law; hence Gr. *Ἀγάμεμνον* instead of **Ἄγαμεμνον*, Lat. *alúmne*, *amplíssume* instead of **álumne*, *ámplissume* (I § 676 p. 541, § 681 p. 548). Or the accent followed that of other cases from the same stem; thus Gr. *δαΐφρον* instead of **δάιφρον* follows *δαΐφρων* (intelligent') *δαΐφρονος* etc., *αὐτοκράτορ* instead of **αὐτόκρατορ* follows *αὐτοκράτωρ* ('having unlimited power') *αὐτοκράτορος* etc., *διογενές* instead of **δῖόγενες* follows *διογενής* ('born of a god') *διογενέος* etc. Elsewhere other factors less easy to detect may have been at work, as in the accentuation of the Lithuanian vocative — e. g. *vilkè* ('wolf'), *naktẽ* ('night').[1])

But even in the singular the parent language would seem to have sometimes used the nominative form as a mode of address: compare, for example, Skr. Ved. (Rig-V. I. 2. 5), *váyav índraš ca cētathaḥ* 'Vāyu and Indra, ye take care', Gr. Hom. (*Γ* 276) *Ζεῦ πάτερ . . . Ἠέλιός τε . ., ὑμεῖς μάρτυροί ἐστε.* And in most languages the forms of the nominative usurped more and more the place of the vocative; sometimes the proethnic vocative form belonging to some class of stems died out completely before the date of the oldest extant specimens of a given language. This happened in Latin to the vocative of *ā*-stems. The genuine vocative forms are most faithfully preserved in Sanskrit. Yet even there in certain monosyllabic stems the vocative was regularly expressed by the nominative form, although accented as a vocative would be; e. g. *díyāu-š*, written *dyāùš* (nom. *diyāú-š*),[2]) as contrasted with Gr. *Ζεῦ*; *bhū́-š* ('earth'),

1) Bezzenberger's conjectures given in the essay cited in the footnote on the last page seem to me highly uncertain.

2) For this accentuation, see Bartholomae, Stud. zur idg. Sprachg., I 82 f.

but Gr. *ἰχθῦ* ('fish'). Perhaps we may follow Collitz (Bezz. Beitr. X 32) in recognising the Idg. vocative of *gāú-ṣ* in the voc. *-gō*, only found in composition (e. g. *bhūri-gō*).

Remark. In Sanskrit, the rules regulating the accent of the vocative singular held good for plural and dual nominative forms when these were used as vocatives (cp. the sing. *díyāu-ṣ* just cited); e. g. *pítaras* (nom. *pitáras* 'fathers'). There is no reason why this should not be regarded as a genuine proethnic tradition, although it is true that no such practice can be proved for any European language: in Attic *ὦ πάτερες*, for example, might have been expected, since we have *ὦ πάτερ*.

§ **201.** 1. *o*-stems. Pr. Idg. **u̯l̥qe*. Skr. *vṛ́ka*; Avest. *vehrka*, O.Pers. *martiyā* 'homo' (I § 649. 1 p. 495). Gr. *λύκε*, *ἄδελφε* beside *ἀδελφό-ς* 'brother', *δαιμόνιε* 'wonderful one'. Lat. *lupe puere*, *fīlie* and *fīlī* from *fīliu-s* (cp. below); Umbr. *Tefre*, *Fisovie*. O.Ir. *fir* for **u̯ire*, *maicc* 'son' for **maku̯e*, *cēli* 'comrade' doubtless for **cēliu̯e* (I § 657. 3 p. 500). Goth. *vulf*, *haírdi* 'herdsman', O.H.G. *wolf*. Lith. *vilkè*, *žõdi* (*žõdi-s* 'word') *gaidỹ* (*gaidỹ-s* 'cock'), cp. below; O.C.Sl. *vlŭče*.

Remark 1. As regards *-ā* instead of *-a* in Vedic, as *vṛ́ṣabhā* 'bull', see Lanman, Noun-Inflection p. 339, Oldenberg, Die Hymnen des Rigveda, I 393 ff., Wackernagel, Das Dehnungsgesetz der griech. Compp. (Basel 1889) pp. 12 f., Bezzenberger in his Beiträge XV 296 f.

It cannot be proved that in the Latin vocatives from *i̯o*-stems *-ī* is contracted from *-ie*. Probably we have here the weak-grade *-ī-*, as we certainly have in Lith. voc. *gaidỹ* and in the Italic nominatives in *-i-s -ī-s*. Cp. II § 63 p. 122, III § 194 p. 74, and Streitberg, Paul-Braune's Beitr. XIV 201.

In Lithuanian the ending *-ai* is also found. This occurs in names of men, as *tẽvai* 'father' *Jõnai* 'Johannes' (cp. Bezzenberger in his Beiträge, XV 299). Can it be that *-i* is the same particle as we see in pronominal nominatives in *-oi̯* (§ 414)? Avest. voc. *haęnē*: nom. *þwōi* (§ 202) points to this conclusion. Brückner (Archiv für slav. Phil. III 276) compares the emphasising *-ai* in *tas-aī toks-aī gražùs-ai*, and the like.

For O.C.Sl. *junĭče* beside nom. *junĭcĭ* 'young bull', etc., see I § 147 p. 134. *i̯o*-stems whose nominative did not end in *-cĭ*

-ži, had the ending of *u*-stems in the vocative (§ 203), as *kraju* (nom. *krajĭ* 'border') *mąžu* (nom. *mąžĭ* 'man').

Remark 2. The following may be suggested as a conceivable reason for the latter change of inflexion. Nominatives such as *krajĭ konjĭ* are parallel to the Lith. *mõji-s žõdi-s* and to the Lat. *ali-s*. Can there have been nominatives in **-i̯e* = Idg. **-i̯o-s* in O.C.Sl., corresponding to Lithuanian nominatives like *vėja-s* ('wind') *svėczia-s* ('guest'), and to *aliu-s* and the like in Latin? Then the vocative in **-i̯e* will have been transformed in order to avoid confusion with the nominative which had the same ending, while this nominative afterwards took the ending of that class of nouns whose nominative ended in *-(i̯)i-s*. Cp. § 194 p. 74.

§ **202.** 2. *ā*-stems. Pr. Idg. **eḱu̯ā*, cp. II § 59 pp. 108 f. Skr. *ámba* 'mother' doubtless belongs here; for the Ar. voc. in **-ai̯* (Skr. *-ē* Avest. *-ḛ̄*) see below. Gr. Hom. *νύμφᾰ* 'nymph'; *-ᾰ* is more commonly kept in masculine words, as *δέσποτα* 'master' *συβῶτα* 'swineherd'. O.C.Sl. *rąko*. And probably we must place in this class Lith. *rankà*, and with *-a* dropped, *mótyn* from nom. *mótyna* 'mother', *Máriuk* from nom. *Mariukà*, and the like; see I § 664 p. 522, and J. Schmidt, Kuhn's Ztschr. XXVII 382.

In Aryan the common ending was **-ai̯*: Skr. *áśvē* Avest. *haẹnḛ̄*. The origin of this ending is uncertain. I think it most probable that a deictic particle has attached itself to this case, — the same deictic *-i* which is found in the nom. sing. in *-ai̯*, Avest. *pwōi ber^exdḛ̄* Pruss. *stai mensai* (see § 190 p. 67, § 414). Cp. Lith. *tėvai* § 201.

Remark 1. Bopp (Vergl. Gr. I[3] 297) and J. Schmidt (Kuhn's Ztschr. XXVII 381 f.) compare Skr. *áśvē* with Gr. *Πυθοῖ*. Others assume a re-formation on the analogy of *i*-stems (Skr. *ávē*).

Another fact may have had something to do with the practically complete disuse of *-a* in the vocative of Aryan *ā*-stems. In Aryan, Idg. *-a* and *-e* both became *-a*; hence the same form represented both **eḱu̯a* f. and **eḱu̯e* m.

In Greek, such forms as *Ἑρμείᾱ αἰναρέτη*, which were properly nominative, came to be regarded as vocative in contradistinction to nominatives with *s*, *Ἑρμείᾱ-ς αἰναρέτη-ς*, and were used as such. See § 190 p. 67.

Masc. vocatives in *-ᾰ* were sometimes used as nominatives, e. g. *ἱππότᾰ* 'horse-driver', *Θυέστᾰ*; cp. the Lat. vocative *Jū-piter Juppiter* (§ 210), which also passed current as a nominative. See

the Author, Morph. Unt. II 199 f., Curt. Stud. IX 259 ff., G. Meyer Gr. Gr.[2] pp. 318 f.

Remark 2. Other explanations, to my mind not convincing, of ἱππότᾰ are given by Fick and Bezzenberger in Bezz. Beitr. III 159 and 174, and by Johansson in Kuhn's Ztschr. XXX 426. J. Schmidt (Pluralb. 401 ff.) assents to my view, provided that there was at least one stem which originally had -ᾰ in both nom. and voc. properly without the action of form-association; otherwise he thinks the explanation impossible. This indispensable stem he sees in εὐρύοπα, originally, as he thinks, a neuter substantive meaning 'wide-eye'; εὐρύοπα Ζεύς would then mean 'wide-eye heaven', the meaning being afterwards changed to 'wide-seer Zeus'. This ingenious explanation of εὐρύοπα is probably right; but the Lat. *Jūpiter* proves that it is wrong to suppose that the nominative use of vocatives like ἱππότα must have begun with this particular word. The reverse should rather be assumed; it is more likely that the change of meaning in εὐρύοπα Ζεύς to 'wide-seer Zeus' was made easier by a previous use of vocatives like νεφεληγερέτᾰ, μητίετα and so forth before Ζεύς as though they were nominative; the same thing preserved the ending of εὐρύοπα before Ζεύς from being inflected in any way, whilst εὐρύοπα before Ζῆν was doubtless preserved by the analogy of the masc. accusative in -α, as αἴθοπ-α.

From Στρεψιάδη-ς in Attic we have the voc. Στρεψίαδες on the analogy of vocatives of *es*-stems like Σώκρατες (§ 209). Cp. in the gen. sing. -*άδους* instead of -*άδου* (§ 229).

Italic. Lat. *equa* is a nominative form. Perhaps the reason why the vocative in Idg. *-*a* was dropped in Latin is that *-*a* became -*e*, and thus -*ā*-stems had the same ending as those in -*o*- (I § 97. 3 p. 91). Again, Umbr. *Tursa* (a goddess) must be a nominative form if the instrumental -*e* of Umbrian, e. g. in pure 'igne', represents Idg. *-*a*; see § 274.

Whether the Irish *tuath* is a true vocative, representing **tōtă*, or a nominative, cannot be determined.

Goth. *giba* O.H.G. *geba* are nom. or acc.; see § 190 p. 67.

§ 203. 3. *i*- and *u*-stems. The ending varied. Sometimes it was *-*oi̯* or **ei̯* and *-*ou̯* or *-*eu̯*, sometimes *-*i* and *-*u*.

a. *-*oi̯* or *-*ei̯*: Skr. *ávē* Avest. *ažē* (beside *ažī*); Lith. *naktẽ* O.C.Sl. *nošti*. *-*i*: Avest. *ažī* (beside *ažē*); Gr. ὄφι; Goth. O.H.G. *anst*.

O.Ir. *fāith* may represent either of the two ground-forms (see I § 657. 1 and 4, pp. 507 f.).

b. *-ou̯ or *-eu̯: Skr. *sū́nō*; Lith. *sūnaũ*, O.C.Sl. *synu*. *-*u*: Avest. *bāzu*: Gr. *πῆχυ*, Goth. *sunu*, O.H.G. *situ sito*. And we should follow Wackernagel (Kuhn's Ztschr. XXIV 301 ff.) in referring Gr. *ἱππεῦ* to **ἱππέευ*, and comparing it with Skr. *áśvayō* (nom. *aśvayú-ṣ* 'craving horses'). As regards *ἱππῆ(ϝ)ος* and so forth see § 261.

For Avestic heteroclite forms in *-ō*, as *rašnuvō* (stem *rašnu-* 'righteousness, justice'), see Bartholomae Ar. Forsch. I 56 f.

In Gothic *-au* is common beside *-u*. But the MSS. show a peculiar liability to confuse *u* and *au* in all the singular cases, which points to a transition from *ŭ* to *ŏ (aú)*; hence it is not safe to infer a vocative form *-áu* = **-ou̯* or **-eu̯*. Cp. Leo Meyer, Got. Spr. p. 574; Leskien, Die Decl. im Slav.-Lit. und Germ. 76; Braune, Got. Gr.[3] p. 44.

§ **204.** 4. *ī-* *i̯ē*-stems (cp. p. 68 footnote 1). The forms to be considered are Skr. *bṛ́hati* Avest. *barenti*, Gr. *φέρουσα*, Goth. *frijōndi*, which are hardly enough to enable us to restore the proethnic form. Ar. *-i* from nom. *-ī*, as in *ā*-stems *-a* is the voc. ending from nom. *-ā*. O.C.Sl. *zemlje* from nom. *zemlja* like *rąko : rąka*.

§ **205.** 5. *ī-* *i̯i̯-* stems and *ū-* *u̯u̯*-stems. The proethnic type is perhaps represented by Gr. *ἰχθῦ* Hom. *Θέτῑ* and O.C.Sl. *svekry*; O.H.G. *sū* and *swigar* (for **su̯ekrū*) may also be genuine vocatives.

Ved. *nádi* (*nadī́-ṣ* 'river') and *śváśru*, like *bṛ́hati* (§ 204). In monosyllabic stems the nominative was regularly used as vocative, e. g. *dhī́-ṣ*, *bhū́-ṣ* (§ 200 p. 82).

§ **206.** 6. *n*-stems. Pr. Idg. **k̑(u)u̯on*. Skr. *śván*. Gr. *κύον*, *Ἄπολλον*.

In the Avesta, where *-m* is written instead of *-n*, the reason is probably to be found in sentence-position and varying surroundings (cp. Bartholomae, Bezz. Beitr. XV 40 and Stud. zur idg. Sprachgesch. I 72). Examples: *þri-zafem* (*þri-zafan-* 'having three mouths'), *āþraom* instead of *āþravem* (I § 158 p. 141) = Skr. *átharvan* 'fire-priest'.

In Greek we find *-ον* only in barytone stems; and even its these the nominative form may be used, as it must be in stems which are oxytone. Nor do we ever meet with *-εν*, but always *-ην*, the ending of the nominative.

The Lithuanian vocative is the nominative form, *szů̃* 'dog', *pëmů̃* 'herd-boy'; also *szunẽ pëmenẽ*, declined as *i*-stems.

§ **207.** 7. *r*-stems. Pr. Idg. **māter*. Skr. *mā́tar*, Avest. *mātar*ᵉ. Gr. *μῆτερ*. Lat. *māter*, *Jūpiter Juppiter*. O.Ir. *māthir*. O.H.G. *muoter*. Pr. Idg. **bhrātor*, **dōtor*. Skr. *dā́tar*, Avest. *dātar*ᵉ. Gr. *φράτορ*, *δῶτορ*. Goth. *brōþar*, O.H.G. *bruodar*.

Whether the Germanic forms are really vocative and not nominative, as Lat. *dator*, *soror* and O.Ir. *siur* were, cannot be decided. As to the Germanic forms, cp. § 192 b. with Rem. 1 pp. 71 f.

§ **208.** 8. Stems ending in an explosive.

nt-stems. Pr. Idg. **bhṛ́ghont*. Skr. *bṛ́han*, *dádat* for **dedn̥t* (I § 647. 7 pp. 493 f., III § 198 p. 77). Gr. *γέρον*.

Avest. *berᵉza* from the nom. sing. in *-ō*; see § 198 pp. 77 f.

Greek. Like *γέρον* we have *Αἴαν*, from nom. *Αἴας* for **Αἰϝαντ-ς*. Hom. *Πουλυδάμᾱ* was formed from the nom. *Πουλυ-δάμᾱς* (for **-δαμαντ-ς*) on the model of *αἰναρέτη* : *αἰναρέτης* and the like.

Goth. *frijōnd* O.H.G. *friunt* as though they were *o*-stems, cp. nom. *frijōnd-s friunt* § 198 p. 78.

Stems made with the suffix *-u̯ent-*. In Aryan, the vocative of these stems like the nominative has *-u̯es-* in place of *-u̯ent-*: Skr. Ved. *áma-vas* Avest. *ama-vō* (this form is not actually found, but it is to be inferred on the strength of *drvō* = *druvō* for **drug-vō*, from Gāthic *drug-vant-* 'deceitful', see I § 453 p. 335). It was not until a later period that *-van* drove out *-vas* in Sanskrit. Cp. § 198 p. 78, and also II § 127 p. 405, § 136 p. 441, Bartholomae Kuhn's Ztschr. XXIX 519 and 531 f. In Greek, *ϝεντ*-stems had no special form for the vocative, but the nominative was used.

As regards the other explosive stems; in Sanskrit it is impossible to say whether the forms in question are vocative

or not, since they may equally well be regarded as nominative. Examples are: *márut* (wind-god) *púru-kṛt* 'rich in deeds' *ákṛtta--ruk* 'possessing uninterrupted brilliancy'. Iranian apparently offers us no forms which can pass for vocatives; the nominative is used instead, e. g. in Yasna 33. 8 *haurvatās* ('safety, weal'). Turning to the European languages, we find no language but Greek that has clearly marked vocative forms, and even Greek has only one or two: *ἄνα* for **ἄνακ* (**ἄνακτ*) from *ἄναξ* 'lord', *γύναι* for **γυναικ* beside acc. *γυναῖκ-α* 'woman'. The following may really belong to *i*-stems: *παῖ* (*παιδ-*, *παϝιδ-* 'child') and *τυραννί* (*τυραννίδ-* 'royalty').

§ **209.** 9. *s*-stems.

Pr. Idg. **dus-menes.* Skr. *dúrmanas*, Avest. *dušmanō.* Gr. *δυσ-μενές*, *Σῶ-κρατες*; Lesb. *Θεόγενε* on the analogy of *-ᾰ* in the voc. of *ā*-stems, cp. § 237 a.

Stem **āu̯sos-* 'dawn': Skr. *úṣas.* The Gr. *ἠοῖ* like *αἰδοῖ*, followed the feminines in *-ω᾽ -ῳ᾽*.

Comparative: pr. Idg. **ōk̑(i)i̯os*: Skr. Ved. *áśīyas.* Part. perf. act. pr. Idg. **u̯ei̯d-u̯os*: Skr. Ved. *vídvas.*[1]) Later Sanskrit has the re-formates *áśīyan*, *vídvan*, see II § 135 p. 429, § 136 p. 441. Lat. *ōcior* is nominative in form.

§ **210.** 10. Pr. Idg. **d(i)i̯eu̯* 'heaven': Gr. *Ζεῦ*, Lat. *Jū--piter Juppiter* (used also as nom.); but in Sanskrit we find *dyāú-ṣ díyāu-ṣ*, the nominative form, *díyāu-ṣ* having taken the accent of a vocative. Cp. Gr. *ἰχθῦ* as contrasted with Skr. *bhū́-ṣ* § 205. For Skr. *-gō* from nom. *gāú-ṣ*, see § 200 p. 83.

Accusative Singular Masculine and Feminine.[2])

§ **211.** In the parent language there was only one suffix for this case, the suffix *-m*, consonant or sonant as the case might require (cp. I § 645. 2 p. 489).

1) For *bhōṣ bhagōṣ*, which do not belong here, see Bartholomae, Kuhn's Ztschr. XXIX 531.

2) Lindfors, Dissert. de accusativo Latinorum, Lund. 1841. Gaedicke, Der Accusativ im Veda, 1880.

To illustrate:

-m in pr. Idg. **u̯lqo-m* 'lupum': Skr. *vṛ́ka-m*, Gr. *λύκο-ν* (I § 652. 3 p. 498), Lat. *lupu-m*, O.Ir. *fer n-* 'virum' (I § 657. 5 and 8, pp. 508 f.), Goth. *vulf* for pr. Germ. **u̯ulfa-n*, but also *þan(-a)* = Skr. *tá-m* 'the, that' with pr. Idg. *-n* retained (I § 214 p. 182, § 659. 5 p. 513, § 660. 1 p. 514, III § 417)[1], Lith. *vìlką*, but also dialectic *ta-n* = Skr. *tá-m* and the like (I § 218 p. 185), O.C.Sl. *vlŭkŭ* (I § 219 p. 187).

-ṃ in pr. Idg. **bheront-ṃ* 'ferentem': Gr. *φέροντ-α* (I § 233 pp. 197 f.), Lat. *ferent-em* (I § 238 p. 199), O.Ir. *carit n-* (I § 243 p. 201, § 657. 5 and 8, pp. 508 f.), Goth. *tunþ-u* 'dentem' for pr. Germ. **-un* (I § 214 p. 182, § 244 p. 202, § 659. 5 p. 513), Lith. *vẽžant-į* 'vehentem' (I § 249 p. 204), O.C.Sl. *kamen-ĭ*[2]. As to Ar. *-am*, e. g. in Skr. *bhárant-am*, where we should expect *-a*, and as to Cypr. *ἀ(ν)δριά(ν)τ-αν* Thess. *κίον-αν* as contrasted with Att. *ἀνδριάντ-α κίον-α*, see I § 231 Rem. p. 196, § 646. 2 p. 490[3], and the Author's Gr. Gr.[2] pp. 118 f. For Umbro-Sammitic *-om* instead of (Lat.) *-em*, see § 218.

Wheeler (Der griech. Nominalaccent, 20 f.) conjectures that there was *-ṃ̄* as well as *-ṃ*, which he sees in Skr. *pár-ā* 'forth, further, beyond, over' = Gr. *πέρ-ᾱ* 'ultra', and in other adverbial words.

§ **212.** 1. *o*-stems. Pr. Idg. **u̯lqo-m*. Skr. *vṛ́ka-m*: Avest. *vehrke-m*, O.Pers. *kāra-m* 'people, host'. Gr. *λύκο-ν*. Lat. *lupu-m*, *equo-m*; Umbr. *poplom* puplum puplu 'populum',

1) In the first volume of this work **u̯ulfa *ʒasti *sunu* were assumed as forms of the last stage of the proethnic period in Germanic. Perhaps we should rather say **u̯ulfą *ʒastį *sunu̯*, with a nasalised vowel. The reason is that Runic inscriptions show forms like *horna*, *staina* etc., but where pr. Germ. *-a* had no nasal following, it has already dropped. See Kluge, Paul's Grundr. I 359.

2) In vol. I § 219 p. 186 and § 665. 2 p. 525 I have erred in stating that *-e* is the regular form assumed by Idg. *-ṃ*. It should be *-ĭ*. As regards *matere* 'matrem' see § 218 p. 95.

3) Another reason for discarding pr. Ar. **-a-* = **-ṃ* may have been a fear of confusion with the instrumental, which would come to be the same in form with the accusative in those systems of declension which had no ablaut.

Osc. húrtúm 'hortum' ταυρομ 'taurum'. O.Ir. *fer n-* 'virum' (I § 34 p. 34), *aile n-* 'alium' (cp. *aile* nom. § 194). Goth. *vulf*, O.H.G. *wolf*; Norse Run. *staina* = Goth. *stáin* 'stone'; Goth. *þan-a* O.H.G. *de-n* 'the, that' with the sign of the acc. retained (§ 417). Lith. *vilką* (dial. *ta-n* 'the, that', etc.), O.C.Sl. *vlŭkŭ*.

i̯o-stems in the accusative, as in the nom. and voc. sing. (§§ 194, 201), sometimes show the weak-grade form *-ĭ-* instead of *-i̯o-*. Lat. *Cornēli-m*, Umbr. *Fisim* 'Fisium'. Goth. *haírdi*? Lith. *žŏdį*, *gaĩdį*, O.C.Sl. *krajĭ*, *konjĭ*, the latter instead of **konī* with *n* palatalised on the analogy of the genitive and other cases.

Armenian *z gail*, *z mard* (*z* is a prefix) I now regard with Osthoff as nominative forms on account of *tasn* 'ten';[1]) see § 174 pp. 22 f. In the same way, the accusative of all stems in this language is doubtless really a nominative form.

§ **213.** 2. *ā*-stems. Pr. Idg. **ek̑u̯ā-m*. Skr. *áśvā-m*; Avest. *haęnąm* O.Pers. *hainā-m*. Gr. *χώρᾱ-ν*. Lat. *equa-m* (I § 655. 4 p. 503); Umbr. *totam tota* Osc. *tovtam* 'civitatem' Osc. víam vía 'viam'. Gall. *loga-n* 'tumulum'. Lith. *raňką*, O.C.Sl. *rąką*.

O.Ir. *tuaith n-* is ambiguous.

Remark 1. This points to a palatal vowel in the ending, and the case may originally have ended in **-i-m *-m̥* or **-ī-m*. In any case the gen. *tuaithe* took its ending from stems in *-i̯ā-* and *-ī- -i̯ē-* (*soillse* and *inse*; see § 229). It is conceivable, then, that *tuaith n-* has been re-formed on the analogy of *inis n-*, which perhaps contains Idg. **-īm*, whose by-form, too, *insi n-*, matches with *soillsi n-* (§ 216). But there is a more likely hypothesis, which Thurneysen suggests. In many stems, amongst which are these very stems in *-i̯ā-* and *-ī- -i̯ē-*, the dative and accusative (leaving aside the *n-* of the latter) came to have the same form; this may have caused the dative *tuaith* to pass for an accusative as well, whilst the like ending of *tuaithe* and *soillse inse* (which was doubtless older) gave a further stimulus to the process. This view is supported by acc. *mnāi n-* beside dat. *mnāi*. It seems certain that *soillsi n-*, *nūi n-* ('novam') do not stand for **-iān*, but took their ending from *insi n-*, which may be compared with Gr. *πότνιαν* and Lith. *žẽmę* (§ 216).

In Germanic, some would trace *-ā-m* in such adverbs as Goth. *ga-leikō* O.H.G. *gi-līhho* 'similar, like'; see Osthoff, Kuhn's

1) In so doing I give up the view set forth in vol. I § 202 p. 169, § 651 p. 497, and by Hübschmann, Armen. Stud. I 88.

Ztschr. XXIII 90 ff., Morph. Unt. I 271. But there are other explanations of these adverbs more likely to be true; see §§ 275, 276. In Gothic, the case in actual use, *giba*, was really a nominative form [1]); as genuine accusatives may be given *þō* f. 'the, that', *hvō* f. 'which?', *áinō-hun* f. 'any one' (cp. *hveilō-hun* 'lasting an hour'). Perhaps the nominative *giba* came to be used as accusative just because these two cases assumed the same form in *þō* etc.; as in Russian the fem. nom. in *-a* was used instead of the acc. in *-u* (O.C.Sl. *-ą*) because nominative and accusative singular were identical in other classes (Vetter, Zur Gesch. der nom. Decl. im Russ., 45 f.).

O.H.G. *geba* A.S. *ȝiefe* pre-suppose **ȝebēⁿ*. None of the explanations hitherto offered seems to me satisfactory. I conjecture that Idg. *-i̯ē-* is hidden in the ending of O.H.G. *gutinne* (later *gutinna*) A.S. *ȝydenne* 'goddess' O.H.G. *sunte* 'sin' (later *suntea suntia*). Of this *-i̯ē-* the weak form *-ī-* is found in O.West.Ger. *Vatvī-ms* 'Vatviabus', and perhaps in O.H.G. *digīm* dat. pl. 'prayers' etc., see § 382. These forms, *gutinne* and so on, will then have the ending **-i̯ē-m* which is contained in Lith. *žẽmę* O.C.Sl. *zemlją*, and possibly in Lat. *faciem* Mid.Ir. *insi n-* (§ 216), and *geba ȝiefe* are ad-formates of these. For *-e* in *gutinne* cp. Braune, Ahd. Gr. § 58 Anm. 1, and § 209 Rem. 3. The genitive singular shows a similar instance of form association, § 229; so also the nominative plural, § 315.

Remark 2. West-Germ. *-ă* may stand for pr. Germ. unaccented *ē* only if the vowel came to be the final sound of the word through the West Germanic loss of the consonant (cp. also the 1st. and 3rd. sing. O.H.G. *salbōta*). We have *ē*, not *ā*, in O.H.G. *chiminnerōdēs* etc.; see Kluge in Paul's Grundr. I 363. And compare what is said above, p. 70 footnote 1.

§ **214.** 3. *i*-stems. Pr. Idg. **ou̯i-m*. Skr. *ávi-m*; Avest. *aži-m*, O.Pers. *šiyāti-m* 'dwelling-place'. Gr. *ὄϙι-ν*. Lat. *turrim*;

1) Burghauser (Germ. Nominalflex. 21) conjectures that pr. Goth. **gebōⁿ* first lost its nasal on the analogy of **vulfa *ansti sunu*, and then became *giba* quite regularly. This must surely fall to the ground, since we have to assume nasalised forms in proethnic Gothic for these words too: they will be **vulfaⁿ *anstiⁿ *sunuⁿ* (or **vulfą *ansti̯ą *sunu̯ą*). See p. 89 footnote 1.

Umbr. *ahtim-em* 'in actionem' uvem 'ovem' (I § 33 p. 33). O.Ir. *fāith n-* (I § 657. 5 pp. 508 f.); Gall. *Ucueti-n.* Goth. *anst*, O.H.G. *anst chumi*; cp. Goth. *i-n-a* O.H.G. *i-n* 'eum', like *þa-n-a de-n* (§ 212). Lith. *nāktį* (dial. *szi-n* 'hunc'), O.C.Sl. *nošti.*

Armen. *(z) sirt* is a nom. form, like *(z) gail* and *(z) zard* §§ 212, 215.

In Latin *i*-stems and consonant stems were fused into one class (II § 93 p. 281, III § 396); which caused the ending *-i-m* to give way to *-em* = Idg. *-ṇ̥, except in a few survivals of the old type (besides *turri-m* there are e. g. *siti-m*, *tussi-m*, *resti-m*): e. g. *ovem*, *mentem* through assimilation to *comit-em nāv-em* and so forth (I § 33 Rem. 1 p. 33).

§ **215.** 4. *u*-stems. Pr.Idg. **sŭnu-m.* Skr. *sūnú-m*; Avest. *bāzu-m*, O.Pers. *magū-m* (read *magu-m*) 'magician'. Gr. *πῆχυ-ν, ἡδύ-ν.* Lat. *manu-m*; Umbr. *trifo* trifu 'tribum' (I § 49 p. 42). O.Ir. *bith n-* (I § 657. 5 p. 508). Goth. *sunu*, O.H.G. *situ sito.* Lith. *súnų*, O.C.Sl. *synŭ.*

Avest. *nasāum* 'corpse' i. e. *nasāvem*, cp. the nom. *-āu-š* (§ 196 p. 76), probably a re-formate containing the loc. sing. in *-āu*, see § 261. O.Pers. *dahyāum* (beside *dahyum*), which was influenced by association with the nom. *dahyāu-š*, at least to begin with, as in Greek *ναῦ-ν* follows *ναῦ-ς*, etc. (§ 221).

Armen. *(z) zard* is nom., like *(z) gail* and *(z) sirt*; §§ 212, 214.

Greek. Hom. *εὐρέ(ϝ)α* 'broad' instead of *εὐρύ-ν* on the analogy of the acc. pl. *εὐρέ(ϝ)-ας.*

§ **216.** 5. *ī-* *i̯ē*-stems (cp. p. 68 footnote 1). Three endings are met with: (1) *-ī-m*: Skr. *bṛhatī-m*, Avest. *barentī-m* O.Pers. *harauvatim* i. e. *-īm* 'Arachosia' (= Skr. *sárasvatī-m*); Gr. *πόλῑ-ν*; and perhaps Mid.Ir. *inis n-*. (2) *-i̯i̯m̥* *-i̯-m̥*: Gr. *πότνι-αν, φέρουσαν φεροντι̯-αν* (cp. below). (3) *-i̯ē-m*: Lith. *žẽmę* O.C.Sl. *zemlją*; and we must doubtless add O.H.G. *gutinne* A.S. *ȝydenne* (§ 213). — Lat. *faciem* and Mid.Ir. *insi n-*, *Brigti n-* may belong to either (2) or (3); then Ir. *-i n-* = *-i̯i̯in* = Gr. *-ιαν*, or it may = *-i̯i̯īn* (*ī* = *ē*). Lat. *suāvem*

must have been preceded by **svāvi-m*; was this for **svāvī-m*? Cp. *socrum* § 217.

We may fairly suppose that two forms only came down from the parent language, *-ī-m* and *-(i)i̯-m̥*, the first where a sonant began the following word, the second before a consonant (cp. 3. pl. opt. **s-(i)i̯-ń̥t* = O.Lat. *sient* beside **s-ī-* in *sīmus* and **s-(i)i̯ē-* in *siēs*). Possibly this *-(i)i̯m̥* gave rise to *-(i)i̯n̥s* in the acc. pl. (§ 328). In the same way, stems in *-ī- -ii̯-* have sometimes *-ī-m* (Gr. *κῖ-ν*) and sometimes *-ii̯-m̥* (Skr. *dhíyam*) in the acc. sing., see § 217. In Greek *-ii̯m̥ -i̯m̥* became *-ιαν -i̯αν*, *-ν* being added on the analogy of *-īν -āν* = *-ī-m -ā-m* etc. And as we assumed in § 191 (p. 68), *-ιαν -i̯αν* called into existence nominatives in *-ια -i̯α*, where such are found in place of those in **-ī*.

The third ending *-i̯ē-m* arose because *-i̯ē-* forced its way in from other cases. An acc. in *-i̯ē-m* sprang up by the side of the gen. in *-i̯ēs* and so on, because *i̯ā*-stems had acc. *-i̯ā-m* beside gen. *-i̯ā-s*.

Goth. *frijōndja* (nom. *frijōndi*) is a re-formate following *sibja* 'kindship' (nom. *sibja*) and *giba*, cp. gen. *frijōndjōs* like *sibjōs gibōs*, *frijōndjái* like *sibjái gibái*. Thus the relation of O.H.G. *gutinne* and Goth. *frijōndja* is similar to the relation of Gr. *ἀλήθειαν* to *ἀληθείᾱν* (gen. *ἀληθείᾱς*), and of Lith. *žẽmę* (nom. *žẽmė*) to *vẽžanczią* (nom. *vežanti*). Cp. p. 68 footnote 1.

§ 217. 6. *ī- ii̯-* and *ū- uu̯*-stems and stems in *-r̥̄*, *-l̥̄*, *-n̥̄*. In pr. Idg. *-īm -ū-m* before a sonant, *-ii̯-m̥ -uu̯-m̥* before a consonant in the following word.

1. *-ī-m -ū-m*. Skr. Ved. *tanū́-m* Avest. *tanū-m* 'body' (beside Skr. *tanúv-am* Avest. *tan(u)vēm*), Avest. *ber^ezai-đīm* 'having great insight'. Gr. *κῖ-ν πόλῑ-ν, ὀφρῦ-ν νέκῡ-ν*. Lat. *vi-m* (I § 655. 4 p. 503), Umbr. sim 'suem' (I § 57 p. 46); Lat. *socrum*, too, may quite regularly stand for **socrū-m* cp. § 197 p. 76. O.H.G. O.Icel. *sū* 'sow'. O.C.Sl. *ljuby* 'love' in the phrase *ljuby dějati (tvoriti)* 'to commit adultery' may belong here.

Remark. I should offer this explanation of *ljuby* with greater confidence, but that the masculine nominatives *kamy* and *plamy* (stem *kamen-* 'stone', *plamen-* 'flame') are used for the accusative as well, where there can certainly be no question of original neuters in *-ōn*. In Russian, *svekry* is found as an accusative (Vetter, Zur Gesch. der nom. Decl. im Russ., 67); but this may be explained like *starina* and similar forms used as accusatives (*ibid.* 45).

2. *-iu̯-m̥ -uu̯-m̥*. Skr. *dhíy-am* 'thought' *bhrúv-am* 'eyebrow', Ved. *nadíy-am* 'river' *tanúv-am* Avest. *tan(u)v-ēm* 'body' (beside Skr. *tanū́-m* Avest. *tanū-m*), O.Pers. *(h)izuv-am* 'tongue' (see Bartholomae, Bezz. Beitr. XIV 245 f.). Gr. ἰχθύα (Theocr.) ὀφρύα (Oppian) and the like; these certainly reproduce the type of formation which we are discussing, but they may be later ad-formates of ἰχθύας ὀφρύας, as Hom. εὐρέα follows εὐρέας (§ 215). Lat. *su-em*. Lith. *žùv-į* 'fish'; O.C.Sl. *krŭv-ĭ* 'blood' (cp. nom. O.Pol. *kry* § 197 p. 76), *svekrŭv-ĭ* 'socrum' (beside *svekrŭv-e*, the genitive form, cp. *mater-e* § 218).

A similar double formation should be assumed to have originally belonged to stems ending in long sonant liquids and nasals (II § 160. 4 pp. 485 f.). Skr. *gír-am* 'praise' for **gr̥r-m̥* (cp. *gī́ḥ* Rig-V. X 99. 11 in Lanman, Noun-Inflection p. 488), *púr-am* 'stronghold' for **pl̥l-m̥*; but *jā́-m* 'being' for **ǵn̥-m*, similarly *khā́-m* 'source' *gō-ṣā́-m* 'winning cattle'. It is easy to see why in the first set of instances the form in *-m* (**gr̥-m*, **pl̥-m*) gave way, and in the others the form in *-m̥* (**ǵn̥n-m̥*).

§ 218. 7. *n-* and *r*-stems.

Pr. Idg. **k̑(u)u̯on-m̥*. Skr. *śvā́n-am*; Avest. *spān-em* (sometimes the stem takes a weak form, following some of its other cases, as *aršn-em* beside *aršān-em* 'male, man'), O.Pers. *asmān-am* 'heaven'. Gr. κύν-α (instead of **κυον-α*, following κυν-ός etc.), τέκτον-α 'carpenter', ποιμέν-α 'herdsman'. Lat. *homin-em homōn-em*, *edōn-em*; *carn-em* follows *carn-is* etc. O.Ir. *coin n-*, *ārain n-*. Lith. *szùn-į* (like Gr. κύν-α), *ãkmen-į*; O.C.Sl. *kamen-ĭ*.

Pr. Idg. **mātér-m̥ *dŏtor-m̥*. Skr. *mātár-am dā́tār-am*, Avest. *mātar-em dātār-em*, O.Pers. *fra-mātār-am* 'ruler'; in Avestic the stems may take the weak form on the analogy of other of their cases, *māþr-em dāþr-em*, *ātrēm* with *t* instead of

þ following *ātar-* (Bartholomae, Ar. Forsch. II 132 f.). Gr. *μητέρ-α* (Hom. *θύγατρ-α* following *θυγατρ-ός* etc. beside *θυγατέρ-α*), *δώτορ-α*. Lat. *mātr-em* (like Avest. *māþr-em*), *datōr-em*. O.Ir. *māthir n-*. Lith. *móter-į*, O.C.Sl. *mater-ĭ*.

Armen. *(z) akn* and *(z) mair*, *(z) dustr* are doubtless nominative forms; see § 212 p. 90.

For Greek Thess. *κίον-αν* Cypr. *ἰματῆρ-αν* see § 211 p. 89.

In these, as in the other consonant stems, Umbro-Samnitic has not *-em* as we should expect, but *-om*, the ending of stems in *-o-*: Osc. *medicatin-om* 'iudicationem', Umbr. *ars-fertur-o* 'infertorem, flaminem' uhtur-u 'auctorem'. The student should observe that the two classes of stems have a like ending in the gen. pl. (§§ 344 ff.) and in the gen. sing. (§ 239), and that the early loss of *o* in the ending *-o-s* (I § 655. 5 p. 503) caused them both to coincide to some extent even in the form of the nom. sing. (Umbr. **patro(m)*: pater = katlu(m) : katel).

The Germanic forms are obscure: Goth. *guman*, *raþjōn* 'rationem', *brōþar*, O.H.G. *gomon gomun*, *zungūn* 'tongue' (for the formative suffix cp. Streitberg Paul-Braune's Beitr. XIV 218 f.), *muoter*, *bruodar*, A.S. *ʒuman*, *brōðor* beside A.S. *dur-u* 'door' (ground-form **dhur-ṃ*).

Remark. The O.Icel. acc. *fǫðor fǫður* does not help us to a decision. There are three possible explanations. (1) We start from *-ṃ* = pr. Germ. *-un*. Then in Gothic, where we find forms like *tunþ-u*, *-u* must have been dropped in words of three or more syllables. This might be granted without more ado for West Germanic languages (cp. Kahle, Zur Entw. der cons. Decl. im Germ. pp. 3 f., Burghauser, Germ. Nominalflexion pp. 21 f.). But what of Goth. *ulbandu* = Gr. *ἐλέφαντ-α*? — (2) Besides the ordinary forms **k̑(u)u̯on-ṃ* **māter-ṃ*, there may once have been forms with *-m* **k̑(u)u̯on-m*, **māter-m*, used before a sonant, which developed quite regularly into those which we find in Germanic. Cp. I § 192 p. 164, § 645. 2 p. 489, and Kluge, Paul's Grundr. I 385. — (3) If it could be proved that Goth. *frijōnd* O.H.G. *friunt*, Goth. *mēnōþ* O.H.G. *mānōd*, Goth. *veitvōd* once ended in *-o-m*, the question would arise whether the prehistoric ground-forms were not **ʒuman-a-n* etc. (cp. above, the Umbro-Samn. *-o-m*).

For Old Church Slavonic *kamen-ĭ*, *mater-ĭ* see p. 89 footnote 2. I follow Scholvin in regarding as genitive forms the variants *mater-e*, *svekrŭv-e* (§ 217); see Scholvin, Die Decl.

pp. 41 f. The use of a genitive form for the accusative depends upon a peculiarity of Slavonic syntax (Miklosich, Vergl. Gr. IV 495 ff.; Vetter, Zur Gesch. der nom. Decl. im Russ. pp. 18 ff.).

§ 219. 8. Stems ending in Explosives.

Pr. Idg. **bhṛ̥ghont-ṃ.* Skr. *bṛhánt-am*, Avest. *ber^{e}zant-em.* Gr. *φέροντ-α.* Lat. *ferent-em.* O.Ir. *carit n-.* Goth. *tunþ-u* A.S. *tōð* 'dentem'; Goth. *ulband-u* 'camel' = Gr. *ἐλέφαντ-α?* Lith. *vẽžant-į*, O.C.Sl. *vezątĭ* instead of **vezątĭ*, *š* having come from the other cases which had *-i̯o-* (cp. *veząšte* § 321, *veząšti* § 191 p. 68).

Skr. *sarvá-tāt-am* 'completeness', Avest. *haurva-tāt-em* 'safety, weal'. Gr. *ὁλό-τητ-α.* Lat. *novi-tāt-em.* With the suffix *-tūt-* Lat. *juventūt-em,* O.Ir. *bethid n-* 'life' (nom. *beothu*).

Skr. *śarád-am* 'autumn'. Gr. *φυγάδ-α* 'fugitive'. Lat. *lapid-em.* O.Ir. *druid n-* 'Druid'. A.S. *hnit-u* 'nit, egg of a louse or small insect'. Pr. Idg. **pod-ṃ* 'foot': Skr. *pād-am* Avest. *pāđ-em*, O.Pers. *pati-pad-am* ('to one's place'); Gr. *πόδ-α*; Lat. *ped-em*; Goth. *fōt-u.*

Skr. *uśij-am* 'craving'. Gr. *μείρακ-α* 'girl', *ὄρτυκ-α ὄρτυγ-α* 'quail'. Lat. *bibāc-em.* O.Ir. *nathraig n-* 'water-snake'. Pr. Idg. **u̯oq-ṃ* 'voice, speech': Skr. *vāc-am* Avest. *vāc-em*, Gr. *ὄπ-α*, Lat. *vōc-em.* Pr. Idg. **rēĝ-ṃ* 'regem': Skr. *rāj-am*, Lat. *rēg-em*, O.Ir. *rīg n-.* Lat. *hallūc-em* 'great toe' for **halo-* or **hali-doic-*, O.Icel. *tǫ* 'toe' for **taih-u* (J. Schmidt, Pluralb. 183; Kluge, Paul's Grundr. I 385).

Skr. *áp-am* Avest. *āp-em* 'water'. Gr. *κλῶπ-α* 'thief'. Lat. *dap-em.*

For Greek Cypr. *ἀ(ν)δριά(ν)τ-αν* and *βρούκαν* i. e. *βρῦκ-αν* (Meister, Gr. Dial. II 231 f.), see § 211 p. 89.

For Umbrian *capirs-o* 'capidem' *curnac-o* 'cornicem' see § 218 p. 95.

Germanic. It is doubtful how we should explain Goth. *frijōnd* O.H.G. *friunt* A.S. *freónd*, Goth. *mēnōþ* O.H.G. *mānōd* 'month', Goth. *veitvōd* 'witness' (cp. Gr. *εἰδότ-α,* II § 136 p. 440).

Remark. Are these forms like those of *o*-stems, and was the pr. Germ. ending **-a-n*? Or pr. Germ. **-un* = Idg. *-ṃ*? See § 218

Rem. p. 95. We can hardly find support for ground-forms in *-*nt-m* (like **māter-m*, above) used before sonants only, as Kluge seems to assume (Paul's Grundr. I 385). If there had been such forms, *-*ntm* would have become *-*nm*, cp. *tigum* §§ 379. 2 and 386.

Goth. *baúrg* 'stronghold' *brust* 'breast' (gen. sing. *baúrg-s brust-s*) may have had the inflexion of *i*-stems, cp. the dat. pl. *baúrgi-m brusti-m.*

§ 220. 9. *s*-stems.

Pr.Idg. **dus-menes-m̥.* Skr. *durmanas-am*, Avest. *duš-manaŋh-em.* Gr. *δυσμενέ-α -ῆ.* Lat. *dē-gener-em.*

Skr. *uṣ́ás-am* (*uṣ́ás-am*) Avest. *ušåŋh-em*, Gr. Hom. *ἠῶ* for **ἠό(σ)-α* 'auroram' (perhaps *ἠόα* was the real Homeric form); Lat. *honōr-em* (for the length of vowel in the formative suffix, see II § 133 pp. 423 f.).

The nominative in *-ēs -ōs* occasioned a re-formation of the accusative in Aryan, Greek, and Latin. Skr. *uṣ́ām* Avest. *ušąm* are formed on the model of *-sthā́-s : -sthā́-m*, Avest. *raϑaę-stå : -stąm* and the like. See § 391, and Collitz in Bezz. Beitr. X 24 f. with the works cited in that place. Att. *Σωκράτην* instead of *Σωκράτη* (cp. § 272), Cypr. *ἀτελήν* instead of *ἀτελίᾳ*, Lesb. *δᾱμοτέλην*, Boeot. *Διογένειν* etc. (G. Meyer, Gr. Gr.[2] p. 321; R. Meister, Ber. der sächs. Ges. der Wiss. 1889 pp. 93 f.) on the analogy of *νεᾱνίᾱ-ς : νεᾱνίᾱ-ν* etc.; analogy has produced the opposite effect in Herod. *δεσποτέα Γύγεα*, which are treated as if they were *εσ*-stems; cp. § 395. Lat. *plēbem famem (plēbei famē)* from *plēbēs famēs* on the model of *acie-m : aciēs.*

Pr. Idg. comparative **ōk̑(i)i̯os-m̥.* Skr. *áśīyāṣ-am* (for the nasalised formative suffix, cp. II § 135 p. 430), in post-Vedic Sanskrit sometimes *-īyas-am* following the other cases (cp. nom. pl. § 322), Avest. *āsyåŋh-em.* Gr. *ἡδ-ῖω* for **-ῖο(σ)α.* Lat. *ōciōr-em.*

Pr. Idg. part. perf. act. **u̯eid-u̯os-m̥.* Skr. *vidvā́ṣ-am* (for nasalised formative suffix see II § 136 p. 441), and sometimes *-úṣ-am*, where the weak form of the formative suffix has ousted the strong (cp. nom. pl. § 322); Avest. *vīdvåŋh-em.* Lith. *mìrus-į* O.C.Sl. *mĭrŭšĭ* (doubtless for **mĭrŭch-ĭ*, according to

I § 588. 2 p. 443), the weak formative suffix having taken the place of the strong, unless these forms are to be characterised as an extension of *-u̯es-* by *-i̯o-* (cp. II § 136 pp. 441 f.). For Gr. *εἰδότ-α* see II § 136 p. 440.

Pr. Idg. **mūs-m̥.* Skr. *mū́ṣ-am.* Lat. *mūr-em.* Further, O.H.G. A.S. O.Icel. *mūs* (cp. dat. pl. *mūsum*) and O.C.Sl. *myšĭ* may possibly be regular descendants of the proethnic form. Gr. *μῦν* instead of **μῦ-α* follows *σῦ-ν* and the like; see II § 160 p. 485.

O.Pers. acc. *nāh-am* 'nose', Lat. *nār-em*, A.S. *nos-u* 'nose'.

§ 221. 10. Monosyllabic Stems in *-i̯- -u̯- -m-*.

Pr. Idg. **nāu̯-m̥* 'ship': Skr. *nā́v-am*, Hom. *νῆ-α* (Att. *ναῦν* is a re-formate following *ναῦ-ς*), Lat. *nāv-em.*

In many instances, the stem-final was dropped before the case-ending *-m* in the parent language itself. Pr. Idg. **gōm*, stem **gou̯-* 'head of cattle': Skr. *gā́m* Avest. *gąm*, Hom. Dor. *βῶν*, Umbr. bum 'bovem', O.Sax. *kō* O.H.G. *kuo chuo* (A.S. *cū* O.Icel *kū* for **ku̯ō*? see p. 80 footnote). I leave it an open question whether Avest. *gāum*, i. e. *gāvem*, and Lat. *bovem* are re-formates in these several languages, or whether there ever was a proethnic form **gou̯-m̥* used before consonants. Att. *βοῦν* is certainly a re-formate, and follows *βοῦ-ς*. Pr. Idg. **d(i)i̯ēm*, stem **d(i)i̯eu̯-* 'heaven, daylight': Skr. *dyā́m diyā́m*, Gr. *Ζῆν*, Lat. *diem*; while alongside of these we find *Jov-em*, and (with the weak form of the stem substituted for the strong) Skr. *dív-am* Gr. *Δί-α*; Gr. *Ζῆν* became the starting point for a new series of forms, *Ζῆνα Ζηνός Ζηνί*, just as **τί-ν* 'quem?' = Idg. **qi-m* gave rise to *τίνα τίνος* etc. (cp. § 314 Rem. 2; Osthoff, Morph. Unt. IV 235 f.; Collitz, Bezz. Beitr. X 49; a new but not convincing explanation is offered by Johansson, *ibid.* XVI 158). In a similar way it would seem that O.Ir. *boin n-* (dat. loc. sing. and nom. acc. du. *boin*) was founded upon a form *boin* = Lat. *bovem*, aided (as Thurneysen points out to me) by the analogy of *coin*, from nom. sing. *cū* 'dog'. Pr. Idg. **rēm* 'property, thing' (cp. Skr. nom. pl. *rā́y-as*): Skr.

rám (also *ráy-am*), Lat. *rem*. Skr. *kṣ́ām* Avest. *zaṃ* 'earth' beside Gr. *χθόν-α* instead of **χθομ-α*. See II § 160 pp. 481 ff.

Nominative and Accusative Singular Neuter.[1])

§ **222.** From the earliest stage of Indo-Germanic which concerns us, the bare stem has served for the nominative and accusative singular neuter. An exception must be made of stems in *-o-*, which use for these cases the stem with *-m* added, the same form which does duty for the accusative singular masculine. A conjecture has already been offered as to the origin of this twofold function of forms with *-m* (§ 186 p. 60).

The pronominal ending *-d* (§ 417) spread to nominal adjectives, but apparently only when they were *o*-stems (§ 227). This is not proethnic, but belongs to the period of separate growth, and particularly to the Germanic and Balto-Slavonic branches.

§ **223.** I. Stems without any Suffix used as nom. and acc. sing. neut.

1. *i*-stems. Pr. Idg. **oqi* 'eye'. Skr. *ákṣi* 'eye' *śúci* 'pure'; Avest. *ar^{e}zahi* the name of the western *karshvar* or region of the world, *būiri* = Skr. *bhūri* 'multum'. Gr. *ἴδρι* 'clever, knowing'. Lat. *mare leve*, Umbr. sakre 'sacre, hostia' (I § 33 p. 33). O.Ir. *muir n-*, where, as in *mid n-* (see 2), *n-* is added on the analogy of the same cases of stems in *-o-* and *-n-*.[2]) O.H.G. *meri* 'mare', a unique survival in West-Germanic; Goth. *fōn* 'fire' doubtless for **fōn-i* (heteroclite gen. *funins*); adj. Goth. *ga-máin* 'commune' *hráin* 'purum'.

2. *u*-stems. Pr. Idg. **medhu* 'sweetness'. Skr. *mádhu* 'sweetness, honey' *svādú* 'suave' (for such forms as Ved. *purā́* beside *purú* see below), Avest. *maδu* 'honey' *pouru* =

1) J. Schmidt, Die Pluralbildungen der idg. Neutra, 1889. W. Meyer, Die Schicksale des lat. Neutrums im Roman., 1883.

2) Cp. Avest. *vohu-m* beside *vohu* 'bonum'. Similarly in mediaeval Greek, neut. *πολύ-ν. γράμμα-ν* etc. by assimilation to *-ο-ν*.

Skr. *purú* 'multum'; Avest. *vohum* beside *vohu* 'bonum' on the analogy of stems in *-o-*. Gr. *μέθυ* 'intoxicating drink, wine' *ἡδύ* 'suave'. Lat. *pecu genu* (for *pecū* and the like see below). O.Ir. *mid n-* 'mead, wine' with *n-* affixed (cp. *muir n-* under 1). Goth. *faíhu* 'money' *filu* 'multum', O.H.G. *fihu fiho* 'cattle' *filo filu* 'multum' (these are almost the only survivals in O.H.G.).[1]) Lith. *gražù* 'beautiful' *saĩdu* 'sweet', Pruss. *pecku* 'cattle' = Goth. *faíhu* (cp. I § 467. 2 p. 343); O.C.Sl. *medŭ* 'honey', whose form probably belongs here, although it became masculine in prehistoric times (cp. nom. acc. *synŭ* 'son').

3. *n-* and *m*-stems. Pr. Idg. **dhē-mn̥* 'a placing, *τὸ θεῖναι*'. Skr. *dhā́ma* '*θέσις*, statute, ordinance, dwelling-place' Avest. *dāma* 'creation', Skr. *nā́ma* Avest. *nāma (nąma)* O.Pers. *nāmā* 'name'; for Ved. *-ā* beside *-a* see below. Gr. *θέμα, ὄνομα* (cp. II § 82 p. 250). Lat. *nōmen, unguen* Umbr. numem *nome* 'nomen' umen 'unguen' (I § 209 p. 177). O.Ir. *ainm n-* 'name' *sruaim n-* 'stream, current' *imb n-* 'butter'; Gall. *curmen* = O.Ir. *cuirm n-* 'beer'.

We likewise find the ending **-ōn *-ēn*, as in the nom. sing. masc. and fem. (§ 192 pp. 69 f.) and in the nom. and acc. pl. neut. (§ 340), in Germanic and Slavonic. *-ōn*: Goth. *namō* and O.H.G. O.Sax. *namo* and A.S. *nama* 'name' (which have become masculine), Goth. *haírtō* O.Icel. *hjarta* 'heart'. *-ēn*: O.H.G. *herza* O.Sax. *herta* 'heart' A.S. *eáre* 'ear'; O.C.Sl. *imę* 'name', and perhaps Pruss. *semen* 'seed, sowing' (O.C.Sl. *sěmę*). If we are to assume that any of such Germanic and Lithuanian masculines as Goth. *stōma* 'stuff, substance' Lith. *stomů* 'stature' (II § 117 p. 375), and of Lithuanian feminines such as *dermė̃* 'agreement, bargain' (Skr. *dhárman-* n.) *gėsmė̃* 'song', were originally neuter, we should have not only **-ōn *-ēn* but **-ō *-ē*, as in the masc. fem. How the formations in **-ō(n) *-ē(n)* which

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1) Can Goth. *tagr* 'tear, lacruma' (O.H.G. *zahar* O.Icel. *tār*) come regularly from **tagru* (cp. Gr. *δάκρυ*, II § 107 p. 322), in spite of the form *faíhu*, *-u* after a long syllable being perhaps differently treated from *-u* after a short syllable? See Johansson, Behaghel-Neumann's Literaturbl. 1889 col. 370.

served as nom. sing. masc. fem. came to do duty for the neuter is a doubtful point. We may refer to J. Schmidt's theories (Pluralb. 82 ff. and 117 ff.), remarking at the same time that this *-*ēn* is identical in form with the loc. sing. in *-*ēn* (§§ 256, 257; similarly Skr. nom. acc. *dhā́ma*: loc. *kṣā́ma*, § 257 c.); nor should it be forgotten that Johansson believes -*n* to have originally been a locative suffix (§ 186 p. 63). —

Another formation is used for the nom. acc. sing. neut. in Vedic Sanskrit, adjectives ending in -*ū*; e. g. *purū́* in *purū́ vásu* 'much goods'. This lengthening of the -*u* was merely rhythmical (Lanman, Noun Inflection p. 406; J. Schmidt, Pluralb. 50 f.). Wackernagel (Das Dehnungsgesetz der griech. Compp., pp. 12 ff.) gives reason for holding this lengthening to be proethnic; hence we must regard the Latin by-forms in -*ū*, *pecū verū genū cornū*, as being of the same kind. The latter forms may, however, be called plural, as J. Schmidt does call them (Pluralb. pp. 49 f., 53; cp. § 339 below). But one very doubtful question remains. It is quite conceivable that the neuter plural in -*ī* grew 'out of a collective singular feminine (II § 109 pp. 332 ff.). Was there really, as Schmidt believes, an original neuter plural in -*ū* as well, which arose in the same way from singular feminine forms in -*ū*? But no such forms as these singular feminines in -*ū* seem to have existed at all in the proethnic language; and the series of neuter plurals in -*ū* may be nothing more than a re-formation on the analogy of those in -*ī*. And if the variation between -*u* and -*ū* — which, as we saw, is a question of rhythm — was to be found in the proethnic stage, we have the result that there were neuter forms in -*ū* which were at once singular and plural.

Along with *dhā́ma* we find such forms as *dhā́mā* in the Vedas (Lanman, p. 531). This lengthening, like the last, is probably due to rhythm. If, as we must assume, this too is of proethnic origin, the parent language had -*n̥̄* beside -*n̥* as it had -*ū* beside -*u*. Now these forms in -*ā* are plural as well as singular in Vedic. Thus the following question arises. Does the plural *dhā́mā*, as Schmidt supposes (pp. 82 ff.), represent an

Idg. **dhēmō*, i. e. a form like the nom. sing. masc. fem. (Lat. *sermō* etc.), being thus related to Avest. *dāmąn* (§ 340) as Lat. *sermō* to Gr. *ἄκμων*? Is it not more likely that the original form was **dhēmn̥̄*, forms in *-n̥̄* being made on the analogy of those in *-ī*; or, it may be, because the relation of *-ī* (in the plural) to *-i* (in the singular) caused a series of singular by-forms in *-n̥̄* to be used for the plural as well?

Remark 1. It seems to me that we are not yet in a position to answer this question. It would be decided in favour of *dhā́mā* = **dhēmn̥̄*, if it could really be proved that Gr. *ἡ ῥῦμη*, *ἡ λῦμη*, *ἡ ἐπι-στήμη*, Cret. gen. *Ϝήμᾱς* (*'εἵματος'*) and the like were once neuters in *-ā* (cp. *ῥῦμα*, *λῦμα*, *εἷμα*). This would be the same analogical change of stem which is seen in O.Pers. *taumā* f. 'family' as contrasted with Skr. *tṓkman-* n. and Avest. *taoxman-* n. (II § 117 Rem. 2 p. 369); cp. also Pol. gen. *brzemia* instead of *brzemienia* from nom. *brzemie* 'burden' on the analogy of *pola* : *pole* (Baudouin de Courtenay, Kuhn-Schl. Beitr. VI 61).

Remark 2. Vedic neuter singular forms in *-i -u* and *-a* (= **-n̥*) are also used for the plural, but almost always in conjunction with a nom. acc. pl. neut.: e. g. *bhū́ri . . . ánnā* 'abundant food', *yṓjanā purú* 'many yojanas' (a measure of distance), *priyā́ nā́ma* 'dear names'. See Schmidt, *op. cit.* 276 ff. According to this scholar, the usage began at a stage in the proethnic language when qualifying words, unless indeed they were *o*-stems, were added to the nouns which they qualified without being inflected, precisely as happens in the case of numeral adjectives like **peŋqe* 'five': *yṓjanā purú* will then be the same in principle as *páñca kr̥ṣṭíṣu* (§ 169 p. 13). The use of a bare stem for the plural, he continues, must have spread from adjectives to substantives: *purú dhā́mā (dhā́māni)*, which is correct, suggesting *dhā́ma purū́ṇi*, which is not. But a simpler explanation would be possible if there were parallel groups of forms in the singular: *-ū -n̥̄* (and *-ī*) alongside of *-u -n̥* (and *-i*). Then we should have (1) *-ū -ā* (and *-ī*) used for both numbers in proethnic Aryan, and consequently (2) the short vowels used for both alike.

m-stem. **sem* 'unum': Gr. *ἕν*, Lat. *sem-per* 'in one unbroken sequence, always' (II § 160 p. 479).

Remark 3. It is not certain whether Gr. *δῶ* 'house' belongs here. Solmsen (Kuhn's Ztschr. XXIX 329) and Schmidt (Plur. 222) postulate an Idg. **dōm*, with a variant **dō* related to it as **k̑(u)u̯ō* = Skr. *śvā́* is to **k̑(u)u̯ōn* = Gr. *κύων*. A different view is taken by Bartholomae (Kuhn's Ztschr. XXIX 497). One more explanation may be mentioned, due to I know not whom, by which *δῶ* is identified with Germ. **tō* 'to', a by-form of *-δε*. According to this conjecture, *ἡμέτερον δῶ* = *ἡμέτερόν δε*, but the meaning of phrases of this kind together with the resemblance of *δῶ* to *δῶμα* gave *δῶ* itself the meaning of 'house'.

§ 224. 4. *r*-stems.

a. No language but Sanskrit has any certain examples of neuter forms from noun-stems in *-er- -ter-* (II § 119 pp. 376 ff.): examples are *sthātṛ́* 'standing' Ved. *sthātúr* (I § 285 p. 228). Probably we have here a Sanskrit re-formation, as we certainly have in the nom. acc. pl. in *-ṝṇi* (§ 341); see Whitney, Sanskrit Grammar § 375. In Greek it is doubtless a mere accident that no such forms are found as *ἀ-πάτορ* from masc. *ἀ-πάτωρ*. Possibly *ἦτορ* 'heart' is an example in point.

b. There is a special group of neuter words in *-r* which have had a heteroclite system of declension from the proethnic period onwards; e. g. Skr. *ū́dhar* gen. *ū́dhn-as*. These shew all kinds of different forms, very difficult to explain. In Aryan we find *-ar*, as Skr. *ū́dhar*, Avest. *karšvar*^{e}, the name of the seven divisions of the earth. But besides this we find in Sanskrit words with two other endings: (1) *yákṛt* 'liver' gen. *yakn-ás* (Avest. *yākar*^{e}, Gr. *ἧπαρ* Lat. *jecur*), *śákṛt* 'dirt, stercus' gen. *śakn-ás*; (2) *ásṛk* (*ásṛg*) 'blood' gen. *asn-ás* (Gr. *ἔαρ* Lat. *assir asser*). Armenian *aʟbeur* 'source, spring' gen. *aʟber* (Gr. *φρέᾱρ* for **φρηϝαρ*, gen. *φρέᾱτος* for **φρηϝατος*). Greek *-αρ* and more rarely *-ωρ*, as *οὖθαρ* and *ὕδωρ* 'water' (O.H.G. *wazzar*); and perhaps we should add *-ορ*, *ἦτορ* 'heart'. Lat. *-er* and *-ur*, as *ūber* and *jecur*. Old High German *-ar* : *wazzar* (Gr. *ὕδωρ*), *tenar* (which has become masc.) 'flat of the hand' (Gr. *θέναρ*). Balto-Slavonic: possibly Lith. *vandū́ undū́* (m.) O.C.Sl. *voda* (f.) 'water' and Lith. *kekẽ* (f.) 'bunch of grapes', which may be related to Gr. *ὕδωρ* and Lat. *cicer* as Lith. *sesū́ motẽ* O.C.Sl. *mati* to Lat. *soror māter* (§ 192).

How this great variety of forms came about it is impossible to say with anything like confidence. All that can be done at present is to offer conjectures more or less uncertain.

Remark. See II § 118 pp. 375 f., and de Saussure, Mém. sur le Syst. prim. pp. 18, 28, 225; the Author, Morph. Unt. II 224 ff., 231 ff.; J. Schmidt, Kuhn's Ztschr. XXV 22 ff.; Osthoff, Morph. Unt. IV 196 ff.; Noreen, Arkiv IV 110; G. Meyer, Gr. Gr.^{2} pp. 325 f.; Zimmer, Kuhn's Ztschr. XXX 231; Johansson, Bezz. Beitr. XIV 163 ff.; Bartholomae, *ibid.* XV 39 ff.; J. Schmidt, Pluralb. 172 ff.

A few points may be mentioned which it is of the first importance to bear in mind.

1. A comparison of the vowel gradation in Gr. ἦμαρ : ἡμέρᾱ, πῖαρ : πῑερό-ς etc. makes it probable that Gr. -αρ came from Idg. -r̥, and not from -ar; and this suits Lat. *jecur femur*. Lat. *ūber* may contain Idg. *-er; but according to I § 97. 3 p. 91 it may also come from *ūbar, and -ar, along with Avest. -ar^e Gr. -ωρ O.H.G. -ar, may represent Idg. *-r̥̄.

O.Icel. *æðr* 'vein' *lifr* 'liver' do not go far to prove that the Idg. ending was *-er.

Aryan -ar (Skr. *ū́dhar*) may be either *-er or *-or (cp. Gr. ἦτορ O.H.G. *waʒʒar*).

2. But on the other hand it seems natural to place Gr. ὕδωρ O.H.G. *waʒʒar* Lith. *vandū̃ kekẽ* on the same level as Gr. φρᾱ́τωρ O.H.G. *bruodar* Lith. *sesū̃ motẽ* (§ 192 pp. 69 ff.), in which case we should have *-ō(r) *-ē(r) as the Idg. endings. There may have been *-r̥ along with these (Gr. οὖθαρ), as *-n̥ along with *-ōn *-ēn (§ 223. 3 p. 100). If O.C.Sl. *voda* (f.) was originally a neuter in *-ō(r), we may with Schmidt connect Skr. *sámā* f. 'half-year, season, year' and Avest. *hama* 'in summer' directly with O.H.G. *sumar* A.S. *sumor* 'summer'; the pr. Idg. form will then be *sm̥mō(r), i. e. Skr. *sámā* will be like *dā́tā* 'dator' (further examples for this Ar. -ā are given by Schmidt Plur. pp. 212 ff., but they are less certain).

3. In discussing the nom. acc. sing. neut. in -ōn -ēn and -n̥, we drew attention to the same endings in the loc. sing. (pp. 100 f.). Here too the locative enters into the question. Johansson and Bartholomae regard the -r of these neuter forms as simply and solely a locative suffix, a view which is indeed supported by Gr. νύκτωρ 'by night' (Avest. *hama* 'in summer') and other words of the same kind. Compare too Ved. *ū́dhar* 'at the udder' (Lanman, Noun-Inflection 488) Avest. *zafar^e* 'in the mouth'. Idg. forms with -er (Skr. *ū́dhar* Lat. *ūber*?) are naturally compared with ὕπερ Lat. *super*, Idg. loc. *pəter (§§ 256, 258). Bartholomae assumes that the parent language had locative forms with -r and with -n, like Skr. *ū́dhar* and *ū́dhan*, used indifferently with the same meaning. "The first consequence was that r-locatives sprang up in n-stems, and n-locatives in r-stems, in addition to the ordinary locative of each class. But this new locative could not fail to produce a transformation of other cases of the stem; and thus it is often hardly possible to decide whether any given forms come from original nasal or liquid stems. In any case, this apparent variety of stems here as elsewhere is not original" (p. 42).

4. For Gr. ἧπαρ Lat. *jecur* the Idg. ending *-r̥t might be assumed on the strength of Skr. *yákr̥t*. Schmidt adds to our list Armen. *leard* 'liver' on account of its *d* = *t*, and he would connect Skr. *śákr̥t* and Lat. *mūs-(s)cerda*, postulating for the latter an old form *scerd or *scord (final -d for -t). Still, this comparison is very doubtful; the Skr. word seems rather to belong to Gr. κόπρο-ς. But we may follow Schmidt in tracing Gr. ἔαρ Epic ἦαρ (εἶαρ) back to *ἤαργ, and Lat. *asser* to *asserg, on the strength of Skr. *ásr̥k (ásr̥g)*.

§ **225.** 5. Stems ending in Explosives.

Participial *nt*-stems.[1]) The original ending was *-nt* or *-n̥t*. But it is not clear how participles of each particular tense stem ended in the original language. In Aryan, *-at* = *-n̥t* came to be the regular ending; it is original (e. g.) in Skr. *dádat* (pr. Idg. **dé-d-n̥t* from √*dō-* 'dare'). Cp. Bartholomae, Kuhn's Ztschr. XXIX 552, 554. Conversely, in Greek **-ă-τ*, the equivalent of **-n̥t*, was dropped, whilst *-αν(τ)* = *-n̥̊t* held its ground; e. g. Dor. Aeol. *πᾶν* 'totum' for **k̑u-n̥̊t* (§ II 126 p. 398), *δαμ-ν-άν* from *δάμ-νη-μι*, and the like, whence the aorist gives e. g. *πέψαν* instead of **πεψᾰ(τ)*. Along with this series, Greek has the ending *-ο-ν(τ)* = Lith. *-ą*. Lat. neut. *-ēns* for pr. Ital. **-ent* (see pp. 106 f.) may represent not only Idg. **-n̥t* or **-n̥̊t* but Idg. **-e-nt*, which is actually contained in Lith. *dū́sę* '*δῶσον*' (cp. below, footnote 1).

Skr. *bhárat* from masc. *bháran* 'ferens', *bṛhát* from masc. *bṛhán* 'projecting, raised, high', *sát* = Avest. *haṗ* from masc. *sán* 'being', *dádat* from masc. *dádat* 'giving'. Gr. *φέρον* from *φέρων* 'ferens', *λιπόν* from *λιπών* 'leaving', *δαμ-ν-άν* from *δαμ-ν-ᾱ́ς* 'subduing', *τιθέν* from *τιθείς* 'placing', *ἀγνύν* from *ἀγνύς* 'breaking', *γνόν* for **γνω-ν(τ)* from *γνούς* for **γνονς* **γνω-ντ-ς* 'perceiving'. Lat. *ferēns* from masc. *ferēns*; masculine and neuter have always the same form in these stems, *oriēns ab-undāns*, *prae-sēns* (= Idg. **s-n̥̊t*?). Lith. *vežą* from *vežąs* 'vehens', *dū́sę* from *dū́sęs* '*δώσων*'.

1) In the light of Schmidt's shewing (Plur. 422 ff.), I see that I was right in my former representation of the ablaut in the Idg. case system of *nt*-stems (II § 125 p. 395); I should not have given up this view, as I did in my Gr. Gr.[2] p. 108, in favour of that of Bartholomae, who holds that in participial forms with a thematic vowel preceding, the original suffix was always *-nt-* with consonant *n* (Kuhn's Zeitschr. XXIX 548 ff.). But I still think, Schmidt notwithstanding, that the thematic vowel in the participle was sometimes *-o-* and sometimes *-e-*. I hold to the belief that Lith. *dū́sęs* represents an original **dō-si̯e-nt-* (Skr. *dāsyánt-*), until Schmidt, who explains the form as an aorist participle, has shewn how this view can be justified by usage. This he tries to do on page 427 of his work; but *dū́sime* is not, as he imagines, an optative form; rather, as *tur-iù* : *tùr-i-me* shews, it contains the weak grade of the suffix *-i̯o-*, and so it is a future indicative. Hence his attempt is quite unsatisfactory.

u̯ent-stems have the same rules as *nt*-participles. Skr. *áma-vat* Avest. *ama-vaḫ* from *ama-vant-* 'acting with violence, powerful' (cp. Bartholomae, Kuhn's Ztschr. XXIX 544). Gr. *χαρίεν* from *χαρι-(ϝ)εντ-* 'graceful'; *σκιόειν* in Ap. Rhod. following the masc. in *-όεις* (see the Author, Gr. Gr.[2] p. 119). For neut. *τῆος τέως*, formed like Skr. Ved. neut. *gnā́-vas* 'rich in women or wives' (perhaps also like *kṛ́t-vas*, see Bartholomae Kuhn's Ztschr. XXIX 536), see II § 127 p. 405.

Remark 1. J. Schmidt is mistaken in his explanation of *τῆος* as being for **τᾱ-ϝατ* (Plur. 356 f.). See Bartholomae, Stud. zur idg. Spr. I 17 f. Schmidt imagines that Idg. *-t* becomes *-ς* in Greek; but see § 241 Rem. 1.

Other Stems ending in Explosives.

Aryan. Skr. *viśva-jít-t* 'all-conquering' *tri-vṛ́t* 'threefold', *dvi-pád* 'bipes'. Skr. post-Vedic *hṛd* 'cor', Avest. *zar^{e}s-ca* 'cor-que' for **zar^{e}t-ca* i. e. **zar^{e}d* + *ca* (I § 473. 2 p. 349). Avest. *as-ca* 'ŏs-que', *as* for **ast*, cp. pl. *ast-i*. Skr. *praty-ák* 'turned backwards, westerly' (stem *praty-áñc-*), *su-yúg* adv. 'well equipped or furnished'.

Greek. *μέλι* 'honey' for **μελιτ*, gen. *μέλιτ-ος*, Latin *mel* perhaps for **mel(i)d* (gen. *mellis* for **meld-es* according to I § 369 p. 280) and this for **melit*, doubtless also O.Ir. *mil* 'honey' (stem *meli-*) for **melit*; see W. Meyer, Kuhn's Ztschr. XXVIII 171; J. Schmidt, Pluralb. 248 f. Gr. *γάλα* 'milk' for **γαλακτ*, gen. *γάλακτ-ος*, Lat. *lac* for **lact*, gen. *lact-is* (Varro's *lact* is doubtless the grammarian's own invention). Gr. *κῆρ* 'heart' for **κηρδ* (II § 160 p. 479), Lat. *cor* for **cord*, gen. *cord-is*. Gr. *ὑπό-δρα* adv. 'looking from under' for **δρακ*; perhaps *δεῦρο* 'hither' for **δε-ϝροπ* or **δεν-ϝροπ* (II § 163 p. 493, and the Author, Gr. Gr.[2] p. 116). Lat. *allec hallec* (beside m. f. *allex hallex*), gen. *(h)allēc-is*. Umbr. tu-plak **δίκρονν ξύλον* vel *δίκρανον*' according to Bücheler, Umbrica p. 154.

Latin adjectival stems ending in explosives show the form of the masculine, not only classes of words like *ferēns bi-dēns*, but also *bi-pēs audāx prīnceps* and so forth. The forms in *-ns* may be regarded as genuine neuters with pr. Ital. *-ns* for *-nt*, and so may *quotiēns*: Skr. *kíyat* 'how much, how far'.

This view is proposed by Thurneysen (Archiv für lat. Lex., V 575 f.), who holds that *bi-pēs audāx* etc. were used for the neuter simply because in *nt*-stems there was a confluence of neuter and masculine.

Remark 2. In Kuhn's Zeitschr., XXIV 42 f., I offered a conjecture with which J. Schmidt agrees (Plur. 89, 403). I suggested that in such phrases as *ferrum bidēns*, the second word may have been originally a substantive masculine or feminine (cp. *domus vetus*), which in becoming an adjective did not adopt the neuter form when used as neuter, but retained its own. J. Schmidt (pp. 87 ff.) supports this hypothesis by a reference to the same kind of thing in the Veda, where such forms as *rakṣō-hā́* 'killing the Rakshas' *dvi-pā́d* 'bipes' (neut. *dvipā́d*) *śata-sā́-s* 'gaining hundred-fold wealth', which are masculine, are used for the neuter as well. May not both causes have worked together to develope the regular Latin usage — both the change of *-nt* to *-ns*, and some such idiom as that suggested here?

Old Irish. *traig* 'foot' for **traget* or **tragit*, cp. dat. pl. *traigth-ib*.

Old Church Slavonic. *telę* 'calf' (gen. *telęt-e*) is probably not a real but an apparent example; its nom. acc. seems to be an original *n*-stem, see § 244.

§ 226. 6. *s*-stems.

a. Pr. Idg. **menos* 'mind'. Skr. *mánas*; Avest. *manō*, O.Pers. *rauta* 'stream' = Skr. *srótas* (cp. O.Pers. *kāra* § 194. 1 p. 73). Gr. *μένος*; an exceptional form showing *-ες* instead of *-ος* (*ε* perhaps from the other cases) is *τέμενες* on an Inscr. of Megalopolis (Le Bas-Foucart no. 331. 31 and 42). Lat. *opos opus*, *genus*; Umbr. meřs *mers* 'ius, fas' for **med(o)s* (I § 633 p. 474), cp. Lat. *modes-tu-s*. O.Ir. *tech teg* 'house' = Gr. *στέγος τέγος* 'roof' (cp. *fer* for **u̯iro-s*, § 194. 1 p. 73), transformed to *tech n-*, a re-formation like *muir n-* § 223 p. 99; Gall. *Οὐινδό-μαγος* = O.Ir. *mag* n. 'plain'. O.H.G. *lamb* 'lamb' A.S. *hrāw* 'corpse' (cp. next page). Lith. *ãkas* 'ice-hole', which like all similar forms has become an *o*-stem (cp. § 403); O.C.Sl. *slovo* 'word' = Skr. *śrávas* Gr. *κλέϝος* 'report, fame'.[1])

1) Whilst this volume was in the press, I received Wiedemann's work Das litauische Präteritum, in which (I 14) he assumes that O.C.Sl. *-o* does not come from **-os*, which he says became *-ŭ*, but that it answers to the Greek *-ας*. His arguments do not convince me.

Lat. *aes* instead of older **a(i̯)-os* (= Skr. *áyas* 'metal, bronze') on the analogy of *aer-is* etc., see II § 132 p. 418.

For Germanic see II § 132 pp. 419 ff. We find two forms for the nom. acc. sing. neuter, one the old ending **-os* (cp. the Finnic loan-words *lammas mallas* = O.H.G. *lamb malz*), the other **-iz* = **-es*, as in A.S. *lemb* (beside *lomb*) = *lammi* Lex Sal., and possibly in (masc.) forms with a short root-syllable like O.H.G. *sigi* A.S. *siȝe* 'victory' (cp. II § 132 p. 421). This **-es* instead of **-os* doubtless came from the other cases of the substantive, not from adjectives (cp. Gr. ψευδές), compare Gr. τέμενες above (conversely, *-os* alone in Lat. *tempor-is* etc. II § 132 pp. 418 f.). Another factor in the change from *s*-stem to *i*-stem (O.H.G. gen. *siges* etc., like *quites*) was perhaps an instr. pl. in *-im(m)* for **-es-mi* (§ 387). Cp. Michels, Zum Wechsel des Nominalgeschl. I 13 ff.

b. Pr. Idg. **dus-menes* 'ill-disposed'. Skr. *durmanas*, Avest. *dušmanō*. Gr. δυσμενές. Lat. *dē-gener* (*-r* instead of *-s* from the other cases).

The difference of the vowels in the final syllable of μένος ψεῦδος: δυσμενές ψευδές here, as elsewhere, doubtless went with some difference in the word-accent; compare Skr. *ápas* 'work' *dvḗṣas* 'enmity': *apás* 'active' *a-dvēṣás* 'without enmity'.

Vedic Sanskrit has some forms in *-ās* instead of *-as*, as *dēvá-vyacās* 'having room for gods'. These were probably a re-formation following the analogy of a group of forms used for the neuter mentioned in § 225 Rem. 2, of which *śata-sás* is an example (cp. Lanman, Noun Infl. 560; J. Schmidt, Plur. 132 ff.).

c. Pr. Idg. **q̥reu̯əs* 'flesh': Skr. *kravíṣ* Gr. κρέ(ϝ)ας. Compare II § 134 p. 425.

d. Pr. Idg. comparative **ōk̑(i)i̯os* 'ocius'. Skr. *áśīyas*, Avest. *āsyō*. Lat. *ōcius*. Goth. *háuh-is* adv. 'higher' for pr. Germ. **-i̯az*. O.C.Sl. *slažde* 'sweeter' for pr. Slav. **sold-i̯o(s)* (I § 84 pp. 79 f., § 665. 4 p. 525).

In Greek, this formation may be represented by ΠΛΙΟΣ (πλος or πλως?) in the sense of πλέον, found in one Arcadian

inscription. Meister transliterates the word πλῶς, and derives this from *πλω-i̯ος (Ber. der sächs. Ges. der Wiss., 1889 pp. 89 f.). But see Danielsson's Epigraphica, Upsala 1890, pp. 51 sqq.

In Old Latin we meet with phrases like *posterior bellum*. There are two alternatives, and the choice is doubtful. The *r* of the other cases may have taken the place of *-s* in the nom. acc. neut. in *-ŏs*, as it did in the nom. masc. in *-ōs; or this *posterior* may be the masculine form.

Along with the forms in *-i̯os were used others in *-*is*, which served as adverbs. This formation is earlier than the time when the branches of the language began to develope on their own account. Gr. πρεῖσ- 'earlier' in Cret. πρεῖσ-γυ-ς Thess. πρεῖσ-βυ-ς beside Ion. πρέσ-βυ-ς (see II § 135 p. 433, and the Author in Ber. der sächs. Ges. der Wiss., 1889 pp. 53 f.). Lat. *magis*, *nimis*; Osc. *mais* 'magis' = Goth. *máis*. Goth. *mins* O.H.G. *min* 'less' for *minu̯-iz, Goth. *vaírs* O.H.G. *wirs* 'worse' for *u̯irs-iz. See II § 135 pp. 428 ff. Johansson (De der. verb. contr. 177) and Streitberg (Die germ. Comp. auf -ōz-, 30) would place here Lat. *plūs*, which they derive from *plōi̯s (for ō cp. Arc. ΠΛΙΟΣ above); *plūs* is differently explained by the Author, Gr. Gr.[2] p. 96 footnote 2, and Danielsson, Epigraphica p. 52.

e. Pr. Idg. part. perf. act. *u̯ei̯d-u̯os 'knowing': Gr. εἰδός. For Skr. *vid-vát*, Lith. *mìr-ę* and O.C.Sl. nom. *mĭr-ŭ* acc. *mĭrŭše* see II § 136 pp. 440 ff.

§ **227.** II. The ending *-o-m* in *o*-stems.

Pr. Idg. *jugo-m 'yoke'. Skr. *yugá-m*, Avest. *xšaṗre-m* O.Pers. *xšaṗša-m* 'lordship, realm' = Skr. *kšatrá-m*. Gr. ζυγό-ν. Lat. *jugu-m*, *nōn* = O.Lat. *n'oenum* (*nōn* comes from this word used before vowels); Umbr. *ortom* 'ortum' kuratu 'curatum', Osc. sakaraklúm 'sacellum' *comonom* 'comitium'. O.Ir. *dliged n-* 'law', *nemed n-* = Gall. νεμητο-ν 'temple', O.Ir. *orbe n- orpe n-* 'heritage, inheritance' = Goth. *arbi* O.H.G. *arbi erbi* 'inheritance' (II § 63 p. 129). Goth. *juk* O.H.G. *joh*. Pruss. *lunka-n* 'bast, inside bark'; O.C.Sl. *polje* 'field' (? see below).

*-*i-m* beside *-*i̯o-m*: Umbr. *tertim* terti 'tertium' Osc. *medicim* 'magisterium'. See § 194 p. 74, § 212 pp. 89, 90.

In Baltic, the only traces of *-o-m which are now left are one or two examples from Prussian (see last page, and Pauli in Kuhn-Schleicher's Beitr. VII 201 f.). Substantival stems have become masculine in Lithuanian and Lettic; e. g. Lith. *lùnka-s* = Pruss. *lunka-n* O.C.Sl. *lyko* 'bast, inner bark' (§ 403). Neuter forms of the Lithuanian adjectives, such as *gẽra* 'good' (cp. *gražù* 'beautiful' § 223. 2 p. 100), can only be used under certain conditions. These cannot be explained as standing for *-ą* = *-o-m*, since dialects which change the *-ą* of the acc. sing. masc. into *-u* have *gẽra*, like the others, and not **geru*. Bopp assumed that *gẽra* has been re-modelled on the analogy of *gražù* (Vergl. Gr. I³ p. 321), which would be a re-formation the reverse of that which gives us Avest. neut. *vohum* instead of *vohu* (§ 223. 2 p. 99). But a more obvious suggestion is that the ending *-a* comes from the pronominal ending **-o-d* (§ 406).

Remark. Some, however, of the Lithuanian "neuters" in *-a* are in all probability really abstract feminine substantives; e. g. *szeñdën szaltà* means 'there is cold to-day', not 'it is cold' (*szaltà* : *szálta-s* = *geltà* 'yellowness' : *gel̃ta-s* 'yellow', II § 158 p. 474).

In Slavonic this neuter **-o-m* (**-ŭ*) is perhaps as hopelessly lost.

It is not quite clear how we are to regard forms such as *igo* 'iugum' *novo* 'novum', whose ending cannot represent **-om*. It is natural to suppose that adjectives of this kind have taken over *-o* from the pronouns, cp. *to* 'that' = Skr. *tá-d*. Thus it is possible that *-o* first obtained foothold in adjectives, and was then extended to substantives by association with substantives in *-o* = **-os* (e. g. *slovo* = Gr. κλέϝος § 226).

But it is quite possible that *polje* 'field' has a different origin. The ending of this word may come from **-i̯e-n* **-i̯o-n* according to the principles laid down in Vol. I § 219 p. 187 (and compare Leskien Handb.² p. 19); for the gen. pl. *poljĭ krajĭ* see § 345. *polje* would be related to a supposed **igŭ* as the acc. pl. masc. *kraję* to *vlŭky* (§ 326). Still, it is also possible to assume an older **poljo* parallel to *igo*. I

prefer the latter view, since we have the acc. sing. masc. *krajĭ konjĭ* with the suffix *-(i̯)i-* instead of *-i̯o-* (§ 212 p. 90), and consequently we should expect a neuter *poljĭ* (cp. p. 109 Osc. neut. *medicim*).

Genitive (-Ablative) Singular.[1])

§ 228. Two suffixes have been transmitted from the parent language to its several branches, *-es -os -s* and *-si̯o (-so)*.

1. It is probable that *-es -os* and *-s* were ablaut-variants of one suffix. In the separate branches of Indo-Germanic, even in historical times, may be observed a variation between *-es* and *-os*, as Lat. *aer-is* and *aer-us*; this seems to depend upon a difference of proethnic accentuation, similar to that in Skr.

1) Kozlovski, Sur l'origine du génitif singulier, Techner's Internat. Ztschr. für allg. Spr. III 286. Benfey, Über die indog. Endungen des Gen. Sing. *īans*, *īas*, *īa*, Abhandl. der Gött. Ges. der Wiss. XIX (1874) p. 3 ff. Henry, L'affixe *sya* du gén. des thèmes démonstratifs, Le Muséon IV (1885) p. 211 sq. A. Kuhn, Über einige Genetiv- und Dativbildungen, Kuhn's Ztschr. XV 420 ff. Bartholomae, Zur Bildung des gen. sing. Stud. zur idg. Sprachg. I 77 ff. *Idem*, Der gen. sing. der *ar*-Stämme, Ar. Forsch. II 109 ff. Havet, Les génetifs indiens des thèmes en *r̥* voyelle, Mém. de la Soc. de ling. III 414 sq. E. A. Fritsch, De casuum obliquorum origine et natura deque gen. singularis numeri et abl. Graecae Latinaeque declinationis conformatione, Giessen 1845. Lugebil, Der Gen. Sing in der sogen. zweiten altgr. Declination, Leipz. 1880. Leskien, Die Genetivform auf *-οιο* in den hom. Gedichten, Fleckeisen's Jahrb. B. 95 (1867), 1 ff. G. Boldt, Der Gen. Sing. der *o*-Declination bei Homer, Tauberbischofsheim 1881. Cavallin, De Homerica forma genetivi in *-οιο*, Mélanges Graux p. 557 sqq. Bechtel, Ionische Genitive singularis auf *-εν*, Bezz. Beitr. X 280 ff. Näke, De Latinorum gen. in *ai* (1830), Opusc. I 181 sqq. A. Petermann, De genetivo substantivorum in *ius* et *ium* exeuntium forma aliquot observationes, Grossglogau 1863. Gandino, Del genitivo *-ās* dei temi feminili in *-ā* nella lingua latina e specialmente nella lingua di Plauto, Rivista di filol. IV (1876) p. 101 sqq. Stowasser, Über den Genetiv der *A*-Stämme bei Lucilius, Arch. für lat. Lex. I 195 ff. Arbois de Jubainville, Le génitif sing. des thèmes féminins en *ā* dans l'ancien irlandais, Mém. de la Soc. de ling. III 79 sq. *Idem*, Le génitif des thèmes en *i* et en *u* en vieil irlandais, *ibid.* VI 54 sq. Förstemann, Zur gesch. altdeutscher Declination: der gen. sing., Kuhn's Ztschr. XVI 321 ff. Schleicher, Der gotische gen. sing. der *u*- und *i*-Stämme, *ibid.* X 80.

tudat-ás 'tudentis' *pad-ás* 'pedis' (Idg. *-és*) in contrast with *bhárat-as* 'ferentis' *jánas-as* 'generis' (Idg. *-os*), just as the two forms of the suffix of the 1st. pl. act., **-mes* and **-mos*, may be explained as arising from two several modes of accentuation which are exemplified in Skr. *i-más* 'imus' and *bhárā-mas* 'ferimus'. See I § 311 ff. pp. 247 ff.

Idg. *-es* is found in Italic, Germanic, and Balto-Slavonic,[1]) *-os* in Greek, Italic, Keltic (and possibly Germanic). Aryan *-as* may of course represent either Idg. *-es* or *-os*; we have not enough evidence from the historical period to shew how far the various forms are to be referred to this or that. No theory can be based upon forms which have a palatal instead of a guttural, like Skr. *vāc-ás* 'vocis' (cp. I § 445 p. 331), since it is always possible to suppose that the palatal is due to analogy.

Where *-os* drove *-es* out of the field (in Greek, that is, and Keltic), there may have been an instinctive desire to make some clearer distinction between the genitive singular and the nominative plural in *-es* (§ 313); for where all ablaut-variations in the stem disappeared, the two cases would become identical in form. The same desire after clearness may have had a different effect in Latin, by helping to drive out *-ĕs* from the nom. pl., replacing it by **-eies -ēs*, the ending of *i*-stems (see § 319).

-s is perhaps the same element which is found in such particles as Gr. *ἄψ* Lat. *abs*. It is most commonly seen in *i*- and *u*-stems. More rarely it is added to consonant stems; as Skr. *dán* Gr. *δεσ(-πότης)* for **dem-s*, O.Ir. *an-me* for **-men-s* (§ 234). It may be contained in *-ās* and *-iēs*, the endings of stems in *-ā-* and *-iē-* (§§ 229, 230); but it is also possible that in these the stem-final has been contracted with *-es -os*.

Genitive forms in *-es -os -s* were also used for the ablative in the parent language and later; thus Skr. *nāv-ás* Gr. *νη-ός*

1) *πρες* in *πρέσ-γυ-ς πρέσ-βυ-ς* is possibly a relic of the form *-es* in Greek. It many have been a by-form of *πάρ-ος* Skr. *pur-ás*. See II p. 433 Footnote 1.

νε-ώς means 'of a ship' and 'from a ship'. It can no longer be determined how this double use arose.

2. *-si̯o* is found with noun-stems, but only those in *-o-*. It is the proper form of the genitive of these stems in Aryan, Armenian (but cp. § 239), and Greek as we have them; cp. also Lycian *-hä -h*, Messapian *-hi -he -h*, Venetian *-h* (Deecke, Bezz. Beitr. XII 153). It belonged originally to the pronouns, whence it spread to noun stems; see Benfey, Über die idg. Endungen des Gen. Sing. 22 ff., and Leskien, Die Decl. 37 f.

In the Latin and Keltic noun we find the ending *-ī* (*-ei̯*? *-oi̯*?) This will be discussed in § 239 b. The question is — does it represent the old nominal genitive ending which gave way to the pronominal ending *-e-si̯o -o-si̯o*? To this no decisive answer can be given, since another possibility has to be taken into account. In other points than this a close connexion may be observed between Italic and Keltic (the latest contribution to this subject is that of Von Bradke, in his Beiträge zur Kenntniss der vorhistorischen Entwickelung unseres Sprachstammes, 1888, pp. 31 ff.) It is therefore possible that this *-ī* is an Italo-Keltic formation, beginning at some period later than the break-up of the parent speech.

In Germanic we have *-so*, which we may assume, with even more confidence than in the case of *-si̯o*, to have been borrowed from the pronouns.

In Balto-Slavonic, noun stems in *-o-* have a form which we cannot but take to be the Indo-Germanic ablative in *-ōd*: Lith. *vilko* O.C.Sl. *vlŭka* 'lupi' (§ 241). Beside these there are also pronominal endings: Pruss. *ste-sse ste-ssei* (nom. *sta-s* 'that') O.C.Sl. *čĭ-so če-so* (nom. *čĭ-to* 'quid'). The reason why the ablative did the work of genitive and ablative both was that forms in Idg. *-es -s* (O.C.Sl. *mater-e* 'matris' *nošti* 'noctis') had originally both these functions. The same reason produced the opposite effect in Greek, where the genitive in *-si̯o* had the meaning of an ablative as well as its own.

All this makes it probable, that when the parent speech

branched off in different directions, the genitive singular of noun stems in *-o-* was not represented by any one invariable formation. Even then the pronominal ending had begun to pass over to nouns, although perhaps not to the same extent in all districts of the Indo-Germanic area. It is just possible that Italic and Keltic *-ī (-ei̯ -oi̯)* was the ending with which the pronominal ending came into conflict. Then the latter will have been wholly driven out of the noun system in Italic and Keltic, where *-ī* won the day; in Balto-Slavonic, both disappeared together. Cp. § 239, *b*. In Germanic, **-so* passed over to the nouns, which is in all probability a peculiarity of the Germanic branch; cp. § 239, *a*. If the "genitives" Goth. *meina þeina seina* O.H.G. *mīn* etc. are ablative forms like the similar forms in Lithuanian, *mãno kẽnõ* (§ 452), then before **-so* passed on to noun stems there may have been a period in Germanic, as there was in Balto-Slavonic, when the ablative in **-ōd *-ēd* had, at least to some extent, the function of the genitive besides its own.

§ **229.** I. The Endings *-es -os -s* (cp. § 228 pp. 111 f.).

1. *ā-stems.* Pr. Idg. **ekuās* 'equae'. Gr. *χώρᾱς*. O.Lat. *viās, fortūnās* (*pater familiās* survives in the classical period): Umbr. tutas *totar* 'civitatis', Osc. *eituas* 'pecuniae'. O.Ir. *mnā* 'mulieris' Idg. **gnās*, an isolated survival (cp. the article *inna* § 420). Goth. *gibōs* O.Icel. *gjafar*. Lith. *rañkos*.

Idg. *-ās*, if it carried the word-accent, was circumflexed: cp. Gr. *τῑμῆς* 'honoris' Lith. *mergõs* 'puellae' (I § 671 p. 536).

Sanskrit. *gnás-páti-š* 'husband of a divine wife' (stem *gnā́-*) is a dubious survival of this formation; it may be a reformate following *jás-páti-š* (§ 233) and nouns in *-as-pati-š* (cp. II § 24 pp. 39 f.). The same may be said of Avest. *vairyā́* (stem *vairyā-* f. 'desirable'), since it may have come from **vairyayā́* by syllabic dissimilation (cp. I § 643 p. 482). The regular endings were Skr. *-āyās* Avest. *-ayā́* (= *-*ai̯ās*) O.Pers. *-ayā* (= **-āi̯ās*), as Skr. *áśrāyās* 'equae' Avest. *haẹnayā́* 'of a hostile army' O.Pers. *taumāyā* 'of a family'. *-i̯ās* came from stems in *-ī- -i̯ē-* (Skr. *bṛhatyás, dēviyás dēryás*, § 230), as did

the dative Skr. *-āyāi* Avest. *-ayāi* instead of *-āi* (§ 247); the Avest. *-ayå* and *-ayāi* have *-a-* instead of *-ā-* doubtless because the instr. in *-aya* = Skr. *-ayā* had the short vowel (§ 276). The starting point for these re-formations was the loc. sing.; in pr. Ar. the loc. sing. of *ā*-stems ended in **-āi̯ā*, and that of *i̯ē*-stems in **-i̯ā* (see § 264). Another factor in transforming the old genitive singular in **-ās* was probably a desire to distinguish its form from that of the nom. acc. pl. (Skr. *áśvās*), which was the same.

Remark 1. With the re-formation *áśvā-yās* following *bṛhat-yás*, compare gen. pl. *áśvā-nām* following the *n*-stems, § 345; Umbr. porta-ia portet' following hab-ia 'habeat' faš-ia 'faciat'; Osc. *censa-um* 'censere' following *ez-um* 'esse'; O.Sax. 1st. 2rd. and 3rd. pl. *scouuo-iad* instead of *scouuod* following *ner-iad sōk-iad* (Danielsson, Stud. Gram. p. 53; the Author, Morph. Unt. III 45, 89 f.); Lat. gen. *viā-ī* following *equī* (see the following page).

Remark 2. A different view of Skr. *-āyās* etc. is taken by J. Schmidt (Kuhn's Ztschr. XXVII 381 ff.), who assumes that the endings have come from *oi̯*-stems. First, he thinks, were formed the gen. **-ai̯-as* and dat. **-ai̯-ai̯*. Then these forms gave way to **-ai̯ās *-ai̯āi̯* for one of two reasons: either they were influenced by stems in *-ī-*, which made *bṛhatyás bṛhatyāí*; or there was a contamination of two pairs of original forms, gen. **-ai̯as* and **-ās* together producing Ar. **-ai̯ās*, and dat. **-ai̯ai* and **-āi* producing Ar. **-ai̯āi*, each with the quantity of the *ā*-stem ending. The *a* of the penultimate, he continues, was kept short in Avestic, whilst in Sanskrit and Old Persian the long vowel of the strong cases crept into the weak. Two remarks may be offered on this. First, the forms here assumed as types are questionable enough in themselves; and secondly, not to dwell upon that, we may well ask why the instr. Skr. *áśvayā* did not become **áśvāyā* if the *-ā-* of the penultimate came from the strong cases. It cannot be shewn that this alleged re-formation was earlier than the time when the pronominal *-ayā* had invaded the instrumental (the same form is seen in Avest. *haęnaya*).

In Sanskrit, the Brāhmanas give us examples of the dative in *-āyāi* used in place of a genitive, as *yājyāyāi* 'of the sacrificial formula'; cp. *striyāi* used as gen. § 230. This reformation seems hardly likely to be due to syntax alone.

In Greek, *ā*-stems which had become masculine took the ending of stems in *-o-* (§ 239); cp. the nom. sing. in *-ā-ς* § 190. Hom. (Aeol.) *Ἀτρείδαο* Boeot. *Τελέστᾱο* like Ep. *Αἰόλοο*. Lesb.

and Dor. contract to *-ᾱ*. Ion. *-εω* for **-ηο*, and *-εω* is contracted to *-ω*; also *-ευ* = *-εο*, see the Author Gr. Gr.[2] p. 39. Arcad. and Cypr. *-αυ*, which is doubtless to be read *-āu*. Att. *-ου* may have either of two origins. It may be the *ου* of *ἵππου* taken over bodily; or else *-āo* became *-εω* (regular), and *-εω* was transformed to *-εο* on the analogy of *ἵπποο*, when this was the genitive; lastly *-εο* would become *-ου*.

In Arcadian *-αυ* passed into feminine stems, as *ζᾱμίαυ* in contrast to Att. *ζημίᾱς*, from *ἡ ζημία* 'loss, punishment'. On the other hand, the fem. ending *-ᾱς* returns to masc. stems in Megarian and Thessalian, as *Ἀραίᾱς*, *Νικίᾱς* as opposed to Att. *-ίου*; this re-formation was due to the fact that genitive and nominative had each the same ending (the gen. *-ᾱ* contracted from *-āo*), cp. § 190 p. 67.

Att. *Καλλιάδους* (nom. *-ιάδη-ς*) follows the analogy of the genitive of stems in *-εσ-*, as *Σωκράτους*. Cp. voc. *Στρεψίαδες* § 202 p. 85. The Rhodian genitive of proper nouns of this kind, *Σαμιάδευς* for example, followed naturally enough from the nom. in *-ης* borrowed from the Ionic dialect; a nom. *Σαμιάδης* has been found in Rhodes (*C.I.G.* 2534). As to *ευ* for *εο* cp. I § 603 pp. 456 f.

In Latin the ending *-āī*, as in *viāī*, was early framed on the analogy of the genitive of stems in *-o-* (*equī* and the like). It may be conjectured that *-āī* first found place in masculine *ā*-stems, whence it afterwards spread to the feminine; cp. Arcad. *-αυ* mentioned above, which was first masculine and then feminine too. Whether the ordinary classical forms *scrībae*, *equae* etc. come from this *-āī* by regular phonetic change, untouched by side influences, or whether the analogy of the loc.-dat. *-ae* had anything to do with it, is hard to say; especially as in the forms which are found on inscriptions (as *Lavarnai* *C.I.L.* I no. 47) we have no means of determining the quantity of the two sounds which make up *-ai*, or of knowing whether they made one syllable or two.

Old Irish *tuaithe* seems to have taken over the ending of stems in *-i̯ā-* and in *-ī-* *-i̯ē-* *(soillse* and *inse)*.

Remark 3. The gen. *Erce* (nom. *Erc*) appears on an Ogam inscription as *Ercias* (Stokes, Bezz. Beitr. XI 151, cp. p. 79). This points to *-*iās* as the older shape of the *-e* of *tuaithe* and *soillse*; and then *inse* (*ī-i̯ē*-stem) would be parallel, and be a form like Goth. *frijōndjōs* from nom. *frijōndi* (§ 230). Still, *Ercias* proves nothing unless we assume *masculines* in *-a*, as Stokes does. But in an Ogam inscription lately found in Wales (see Arch. Cambr, 5th. Series VI no. 23), there is the genitive *Avittoriges*, whose *g* is perhaps meant to express the sound of *j* (Latinised nom. *Avitoria*). What is to be said of this? It is worth considering whether *-ē* may not have been regularly kept in pre-Keltic *-*ēs* (elsewhere in Keltic *ē* becomes *ī*), especially as *-the* (*-tha*), the suffix of the 2nd. person sing., seems to answer to Skr. *-thās* = Gr. Dor. *-θης*. This would make it probable that Keltic also had the Idg. gen. *-i̯ēs* (*ī- i̯ē*-stems), and *inse* must be compared with the Lat. gen. *faciēs*. These questions have been suggested by certain communications which I have received from Thurneysen; I leave them for others to decide. D'Arbois de Jubainville is I believe mistaken in his view of the matter (Mém. III 80).

O.H.G. *geba* A.S. *ȝiefe*, O.H.G. *sippe (sippea)* A.S. *sibbe* (cp. nom. Goth. *sibja* 'kindred'), probably with the ending pr. Germ. *-*ēz*, i. e. *sippe sibbe* is an ad-formate of *gutinne ȝydenne* (with Idg. *-*i̯ēs*, § 230), and carried *geba ȝiefe* along with it. The stem was changed to an *ā*-stem without *i̯* in Old High German, before *-*i̯ēz* became *-e* (cp. Braune Ahd. Gramm. § 58 Anm. 1, § 209 Anm. 3). The acc. sing. (§ 213 p. 91) and the nom. pl. (§ 315) were modified by analogy in the same way.

Quite early in O.H.G. the dative form *gebu gebo* is sometimes found instead of *geba*, and in the tenth century it gets the upper hand.

Old Church Slavonic *rąky* 'of a hand' and *dušę* 'of a soul' pre-suppose a ground-form with *-*ans* or *-*ons*; cp. the same form in the acc. pl., where the original ending was *-*ans*. See I § 219 p. 187. Scherer and many others have assumed that the gen. sing. *rąky* really is this acc. pl. form; it is said that because the acc. pl. took the place of the nom. pl. in *-*āS*, therefore it also took the place of the gen. sing., which had the same form. This is hard to believe. In any case there was a connexion between this *-y -ę* and the ending of the gen. sing. fem. in the pronominal form *tojǫ* (nom. *ta* f. 'this') — see

§ 420; but it remains uncertain whether this ending properly belonged to pronouns alone, and only spread to nouns afterwards.

§ **230.** 2. *ī- i̯ē*-stems (cp. p. 68 footnote 1). Pr. Idg. **bhr̥ĝhn̥t(i)i̯ēs* 'celsae'. Skr. *bṛhatyás*, *dēviyás dēryás* 'deae'; Avest. *barentyå*. Lat. *faciēs*, *rabiēs*. O.H.G. *gutinne* A.S. *ʒydenne* 'deae', cp. § 229, last page. Lith. *žẽmės*.

Along with these are forms which follow the *i̯ā*-class: Gr. *φερούσης*, *ποτνίᾱς*; Lat. *māteriae* (nom. *māteriēs* and *māteria*); Goth. *frijōndjōs* (like *sibjōs*, nom. *sibja* 'kinship'); Lith. *vežancziõs*, *marcziõs* (nom. *martì* 'bride'). Whether O.Ir. *inse. Brigte* contain Idg. **-i̯ēs* or **-i̯ās* is uncertain; see § 229 Rem. 3 on the last page.

In Sanskrit, the Brāhmana language has the dative in place of the genitive, as *striyāi* instead of *striyās* (nom. *strī* 'woman'). Cp. *yājyāyāi* § 229 p. 115. In Avestic forms are occasionally found which have been influenced by the analogy of stems in *-ī- -ii̯-* and in *-i-*: e. g. *haraiþjō* (*haraitī-*, the name of a mountain range).

In Latin we have *-iēī* beside *-iēs*, *faciēī*, *aciēī* — a reformation of the same kind as *viāī* (§ 229). Further, we find *-iī*, *faciī*, *progeniī*, *luxuriī*; *-iī* : *iēī* = *-ae* : *-āī* (cp. § 248). Lastly *-iē*, down to the classical period, as *faciē* — probably the dat.-loc. form (§§ 248, 265).

The Irish genitive *inseo* (i. e. *ins*^{e}*o*) is framed on the model of an *i*-stem. Cp. dat. *inis* § 248.

Old Church Slavonic *zemlję* and *veząštę* like *dušę* (§ 229).

§ **231.** 3. *i*-stems. Here we have two types, *-ei̯-s -oi̯-s* and *-i̯-es -i̯-os -ii̯-es -ii̯-os*. Of these the former certainly and the latter most probably is proethnic. But at the same time it is not clear how the two types were originally distributed.

a. *-ei̯-s* and *-oi̯-s*. Which of these was used in a given word would be originally determined, as we may conjecture, by the accent of the word: say, **mn̥téi̯-s* 'mentis', **óu̯oi̯-s* 'ovis'. Ar. **-ai̯-š* (= **-ei̯s* or **-oi̯s*?): Skr. *ávē-š*; Avest. *ažōi-š*, O.Pers. *fravartai-š* 'of Phraortes'. Gr. Pamphyl. *Λεγοπόλαις*

(= Att. *Νεοπόλεως*), if correctly preserved, is the only form of this kind in Greek. Umbr. punes 'poscae' *ocrer* 'ocris, montis', Osc. Herentateís 'Veneris, Volupiae'[1]), pointing to pr. Ital. *-eḯ-s*. Germanic has only fem. substantives: Goth. *anstáis* for *-oḯs*, O.H.G. *ensti* A.S. *ēste* for *-eḯs*, or for *-iḯ-es (b.) or *-eḯ-es (cp. Hom. *πόλεος*), like the loc. *ensti* perhaps for *-eḯ-i (§ 266). Lith. *naktẽs*, O.C.Sl. *nošti*, common ground-form *-eḯs or *-oḯs?

b. *-ḯ-es -ḯ-os*, *-iḯ-es -iḯ-os*. Skr. *-y-as -iy-as* beside *-ē-ṣ* in the masc. and neut., as *ávyas*, *ariyás* 'of a pious man'. In Avestic there are a few examples of the ending *-yōiš*, as *jainyōiš* (stem *jaini-* 'woman', cp. Bartholomae Ar. Forsch. III 64). But this may well have arisen by contamination of *-ōiš* and *-yas*; cp. Goth. *kinnáus* 'of a cheek' i. e. *kinu̯au̯s (§ 232). Armen. *srti*, perhaps for *-iḯes or *-iḯos (cp. *zardu* § 232). In all dialects of Greek except Ionic and Attic the only type is *ὄφιος*, *φύσιος*, which formation is also found in Ionic beside that with pr. Gr. *-eḯ-os which will be described anon (cp. nom. pl. *ὄφιες* § 317); *πόλιος* may be referred to the nom. *πόλῑ-ς* (§ 233). It is a question whether *Toranias*, found in an Irish Ogam inscription, belongs here; cp. *Ercias* § 229 Rem. 3 p. 117. The ending of German masc. *i*-stems, Goth. *gastis* O.H.G. *gastes* O.Icel. *gests*, need not have been borrowed entirely from stems in *-o-*. A pr. Germ. *-ḯ-az or *-ḯ-iz must have become *-iz*, and this could easily have become perfectly assimilated to *-e-s(o)* (§ 239), especially if the historic form of the "dative" of these *i*-stems was originally a genuine *i*-case (§ 260).

This second formation seems to be related to the first as Skr. *nā́mn-as* to O.Ir. *anme* 'nominis' (for *-mens*), Avest. *hamaęstr-ō* 'of an antagonist' to *sāstar-š* 'of a ruler', Gr. *ἀνδρ-ός* to Avest. *nar-š* 'of a man', Skr. *div-ás* to *dyṓ-ṣ* 'of

1) Of course it is a question whether this form belongs to a stem with *-tāti-* or with *-tāt-* for its suffix (see II § 102 p. 310). It belongs here in any case, since the -eís of all consonant-stems came from those in *-i-*. It so happens that no genitive from an undoubted original *i*-stem has been preserved.

heaven', Gr. *βος in *Βόσ-πορος* for **gu̯-os* to Skr. *gṓ-ṣ* 'bovis'. But even if it be proethnic, it is possible that in one or other branch of the original language it is partly due to the analogy of *ī-* *i̯i̯*-stems with the Idg. ending **-i̯i̯-es *-i̯i̯-os*. For Greek, in particular, this suggestion can hardly be rejected, in view of the other cases of the paradigm in dialects where the formation is found.

c. Feminine forms in Sanskrit have *-yās* as well as *-ēṣ*, e. g. *ávyās*. This is a re-formation on the lines of the *ī-* *i̯ē*-class (§ 230), and it becomes more and more common in the course of the history of this language. We find a corresponding dat. in *-yāi* (§ 249) and loc. in *-yām* (§ 266). The point of contact between these two classes of stems was the instr. sing., *ávyā* : *bṛhatyā́* (§ 278); hence the re-formation arose. Avest. *vay-ō*, contrast Skr. *vē-ṣ* (*ví-* 'avis'), is a re-formate; the stem is monosyllabic, which had something to do with the change. Compare (1) gen. pl. *vay-ąm*, *þray-ąm* 'trium' (§ 348), with the strong stem, and (2) as monosyllabic stems, gen. sing. Ved. *nár-as* (following *nár-i*): Avest. *nar-š* (§ 235), Ved. *gáv-as* (following *gáv-i*): *gṓ-ṣ* (§ 238).

Skr. *pátyur* 'of a husband' and *jányur* 'of a wife' follow the form of *pitúr mātúr* (§ 235); cp. dat. *páty-ē* like *pitr-é* (§ 249), instr. *páty-ā* like *pitr-ā́* (§ 278). See Wackernagel, Kuhn's Zeitschr. XXV 289 f.

Attic *ὄφεος*, *φύσεος*, *πόλεος* (the last, which in found in Homer and Theognis too, comes from the stem *πολι-* nom. *πόλῑ-ς*, a by-form of the stem *πολῑ-* nom. *πολῑ-ς*). These cannot rank as regular developements from proethnic Greek forms in **-εος* for **-εϊ-ος*, because *-εο-* is uncontracted. Possibly *-ε(ϊ)-ος* was affected by the analogy of *-ε(ϝ)-ος* in *υ*-stems (J. Schmidt, Kuhn's Zeitschr. XXVII 301 f.). Cp. *ὄφει* § 266, *ὄφεις* § 317, *ὄφεων* § 348.

The loc. *πόλῃι* (§ 260) gave rise to Hom. *πόληος*; and by quantitative metathesis (I § 611 p. 462) *-ηος* became *-εως*, the Attic variant, as *πόλεως*, *ὄφεως*.

In Latin, no example of the Umbro-Samnitic and pro-

ethnic Italic ending *-ei̯s* can be found. The forms ending in *-is -us* which are found (as *ovis*, *partis*, *partus*) are due to the same confusion of *i*-stems with consonant stems which we saw in *ovem*, § 214 p. 92. We are not justified by the known laws of sound in assuming that *ovis* stands for **ovjis* and answers to Skr. *ávyas* (Froehde, Bezz. Beitr. XIV 114).

In Old Irish, substantives have *-o -a*, as *fātho fātha*, which is to be referred in the first instance to **-ōs*, because of *Ivacattos* (or *Evacattos*) and *Suvallos*, which occur in Ogam inscriptions. The formation is not clear.

Remark. It is quite possible that the ending came from *u*-stems (§ 232), as in Old Icelandic the *-ar* of *u*-stems passed over to masc. stems in *-i-* (e. g. *þular* from nom. *þulr* 'speaker, orator'). But one can see no sufficient cause for such a process at so early a stage; on the other hand, it is certain that the gen. pl. *bithe n-* was built on the analogy of *fāthe n-* (§ 349). A ground-form **-o(i̯)-os*, a transformation of **-oi̯s*, would satisfy the phonetic conditions; but it is in itself hardly probable (in spite of d'Arbois de Jubainville, Mém. VI 54). That **-oi̯s* could become *-ōs* in the regular course of sound-change may be said to be out of the question.

§ 232. 4. *u*-stems. Pr. Idg. *-eu̯-s -ou̯-s* and *-u̯-es -u̯-os -uu̯-es -uu̯-os*, answering to the *i*-stem types (§ 231). It is true that *-eu̯-s*, which is here assumed to be a by-form of *-ou̯-s*, cannot be definitely shewn to have existed, but it is fairly inferred from the analogy of stems in *-i-* (Osc. *castrovs*: Herentateís).

a. *-eu̯-s* and *-ou̯-s*, the one belonging to original forms accented like **sūnéu̯-s* 'filii', the other (say) to **médhou̯-s* 'mellis'. Ar. **-au̯-š* (= **-eu̯-s* or **-ou̯-s*?): Skr. *sūnṓ-ṣ*; Avest. *bāzēu-š bāzao-š*, O.Pers. *kūrau-š* 'Cyri'. Lat. *manūs*; Umbr. *trifor* 'tribus', Osc. *castrovs* 'fundi'; arguing from the analogy of the Umbr. Osc. **-ei̯-s* in *i*-stems, we may derive Ital. **-ou̯s* from **-eu̯-s* (I § 65 p. 52). O.Ir. *betho -a*, Ogam inscr. *Trenalugos*, *Brusccos* (doubtless with *ō*) for Idg. **-eu̯s* or **-ou̯s*; in the *-u* of *Trenagusu, Nettasagru* on Ogam inscriptions from Wales (Stokes, Bezz. Beitr. XI 145) Thurneysen conjectures a dialectic transformation of **-ōs*. Goth. *sunáus*, O.H.G. *fridō frido* 'of peace', O.Icel. *sonar* pr. Norse **sunōʀ*, pr. Germ. **-au̯s* = Idg.

*-oṷ-s. Lith. *sūnaũs* O.C.Sl. *synu*, common ground-form *-eṷ-s or *-oṷ-s?

b. -ṷ-es -ṷ-os, -uṷ-es -uṷ-os. Skr. -v-as -uv-as beside -ō-ṣ in the masculine and neuter, as *paśv-ás* 'pecoris' *mádhv-as mádhuv-as* 'mellis'. Similarly in Avest. -v-ō beside -ēuš -aoš, as *xraϑw-ō* (*xratu-* 'will, power, intent') = Skr. *krátv-as*. Armen. *zardu*, perhaps for *-uṷ-es or *-uṷ-os (cp. *srti* § 231 p. 119). Greek Ion. γουνός for *γονϝ-ος (from nom. γόνυ 'genu', cp. the Author, Gr. Gr.[2] § 70 *b*. Rem. p. 100), γένυος (from nom. γένυ-ς 'chin' = Skr. *hánu-ṣ*). Lat. *senātuis* O.Lat. *senātuos*, *cornuis*, Falisc. *zenātuo* (-s dropped) may have come from either of two groups of forms — (1) from *-uṷ-es *-uṷ-os or *-ṷ-es *-ṷ-os, or (2) from *-eṷ-es *-eṷ-os or *-oṷ-es *-oṷ-os; cp. dat. *senātu-ī* § 250. In Germanic are found a few forms in -nn- for -nṷ- (I § 180 p. 158): Goth. *mans* O.H.G. *man* 'of a man' for *manniz *manṷ-iz or *mannaz *manṷ-az = Skr. *mánv-as* (assumed by-form of *mán-ōṣ*)[1]); Goth. *kinnáus* 'of a cheek', a composite form arising from contamination of *kinauz = Skr. *hánōṣ* and *kinṷiz *kinniz = Gr. γένυος (cp. Avest. *jainyōiš* § 231 p. 119), whence by analogy comes the nom. *kinnu-s* instead of *kinus = Skr. *hánu-ṣ* etc.

Here, as with the *i*-stems (cp. § 231 pp. 119 f.), it is doubtful how far the second type represents an original formation. The analogy of *ā-* *uṷ*-stems, which had the pr. Idg. ending -uṷ-es -uṷ-os, may have acted in some instances.

c. Sanskrit. The feminine has a further ending -*vās*, as *dhēnv-ás* from *dhēnú-* 'milch cow' (so also dat. -*vāi*, loc. -*vām*), parallel to the -*yās* in feminine *i*-stems (§ 231 p. 120). Compare § 279. Avest. *bāzāuš* with the same *āu* as the nom. sing. etc., see § 261.

Greek. Adjectives and some substantives have -ε(ϝ)-ος, as ἡδέος, Ion. Att. πήχεος, ἄστεος (ἄστυ n. 'city'), Boeot. ϝάστιος

1) A different explanation of Goth. *mans mannē mannam* etc. — which, however, does not convince me — is given by Bezzenberger in the Deutsche Literaturzeitung 1890 p. 14. He assumes two forms of the stem, *man-* and *manan-*.

for *ϝαστεος (I § 64 p. 51), Cret. υἱέος (υἱύ-ς 'son'). Also Att. πήχεως, ἄστεως on the analogy of ὄφεως πόλεως (§ 231 p. 120).

Latin has from its earliest stage another set of forms such as *quaestī sumptī*. Later on the other cases were often formed as though from *o*-stems, and in the end this declension absorbed all *u*-stems. It seems to me a dubious point whether the genitive in *-ī* was first suggested by the change of *-os* to *-us* in the nominative of *o*-stems (cp. *dēnsu-s torru-s* declined as *o*-stems, whilst Gr. δασύ-ς Skr. *tr̥ṣú-ṣ* are stems in *-u-*, Osthoff, Morph. Unt. IV 78).

§ 233. 5. *ī- i̯i̯-* and *ū- u̯u̯*-stems and stems in *-r̥̄, -l̥̄, -n̥̄*. Pr. Idg. *-i̯i̯-es -i̯i̯-os, -u̯u̯-es -u̯u̯-os*, e. g. **bhru̯u̯-es -os* (nom. **bhrū-s* 'brow'). Skr. *dhiy-ás* 'of thought', Ved. *nadíy-as* 'of a river', *bhruv-ás*, Ved. *śvaśrúv-as* 'socrus', Avest. *tan(u)-vō* 'of a body'. There is a second group of forms with the sign of the feminine, Skr. *dhiyā́s nadiyā́s bhruvā́s śvaśruvā́s* (like the dat. in *-āi* and loc. in *-ām*); this is analogous to what we see in fem. stems in *-i-* and *-u-* (§ 231 p. 120, § 232 last page). The point of contact with *ī- i̯ē*-stems where this series of forms began was the instr. sing., *dhiy-ā́* as compared with *dēviyā́* and so forth; see § 280. Gr. κιός, πόλιος from nom. πόλῑ-ς (cp. § 231 p. 119), ὑός 'suis', ὀφρύος, νέκυος (from nom. νέκῡ-ς). Lat. *suis socruis* (also *socrūs* as though a *ú*-stem); it is not probable that *vīs* came from **vii̯-es* by simple phonetic change (the view of Stolz, Lat. Gr.[2] p. 337); it is better to explain *vīs* by proportional analogy, as being related to nom. *vīs* acc. *vim* as *diēs faciēs* (gen.): *diēs* (nom.): *diem*. O.Icel. gen. *sȳr* 'suis' doubtless for **sū-iz* (cp. gen. pl. *sūa*), having taken *sū-* instead of *su̯u̯-* from cases whose suffix began with a consonant. Another explanation of Lat. *vīs* O.Icel. *sȳr* will be given in the next paragraph. O.C.Sl. *krŭv-e* 'of blood', *svekrŭv-e* 'socrus'.

Stems ending in a long sonant liquid or nasal (II § 160. 4 pp. 485 f.) are treated in a similar way. Skr. *gir-ás* 'of praise' = **gr̥r-es -os*, *pur-ás* 'of a stronghold' = **pl̥l-es -os*, *gō-ṣáṇ-as*

(nom. *gō-ṣā́-s* 'gaining cattle') for **-sn̥n-es -os*. If an old independent gen. *jās* be contained in *jā́s-páti-ṣ* 'master of the house or family', this would be a formation with *-s* for the sign of the genitive; and we should then perhaps compare Lat. *vīs* O.Icel. *sȳr* directly with *jās*.

§ **234.** 6. Stems ending in a Nasal. Most of these have *-es -os*. *-s* is seen in Irish neuters formed with *-en-* and *-men-*, in Avest. *xwēnəg* 'of the sun', and in the root-noun **dem-* 'domus'.

Remark. Polysyllabic *en*-stems thus show the genitive in *-en-s* only in one branch of the Indo-Germanic languages. This is not really so strange as it might seem; we have but to remember in how many languages *-ns* was bound to change in accordance with their phonetic laws, and how easy it was for the forms thus changed to be sacrificed to the feeling for uniformity which causes case-systems to be levelled down to one type. — J. Schmidt (Pluralb. 100) thinks that Avest. *ayąn* is a genitive in *-ns*; which is not very probable, because of the long vowel in the last syllable (*-ąn* = *-ān*). I believe the form to be a locative singular used for other cases (§ 257). Bartholomae is more likely to be right in calling the Vedic phrase *trír áhan(n)* 'thrice in the day' a genitive (Stud. zur idg. Sprachg. I 104).

a. Stems in *-n*. Pr. Idg. **k̑un-es -os* 'canis' (**k̑un-és*, cp. § 228 pp. 111 f.).

Skr. *śún-as* (for the accent see p. 70 footnote 2) Avest. *sūn-ō*, Skr. *aryamṇ-ás* (*arya-mán-* 'comrade, friend') Avest. *airyamn-ō* (*airya-man-* 'obedient'), Skr. *áśman-as* Avest. *asman-ō* (*áśman- asman-* 'stone, heaven'). Sometimes this or that dialect would show preference for strong forms of the stem, as Ved. *vṛ́ṣaṇ-as* beside *vṛ́ṣṇ-as* 'of a bull', Avest. *airyaman-ō* beside *airyamn-ō*, and cp. II § 117 Rem. 1 p. 366, and III § 251. With *-s* we have Avest. *xwēnəg* 'of the sun' = pr. Ar. **sṵan-s*, a by-form of *hvar-* = Ved. *suvar-*, cp. II § 118 pp. 375 f., III § 224 pp. 103 f.

Armen. *akan* (nom. *akn* 'eye'), *ełin* (nom. *ełn* 'stag'), like O.C.Sl. *jelen-e* 'of a stag' Gr. *ἀδέν-ος*. The original weak stem is seen in *arn* 'of a man', like Avest. *aršn-ō*.

Greek *κυν-ός*, *ἀρν-ός*, and with the strong stem *τέκτον-ος*, *ποιμέν-ος*, *ἀγῶν-ος*, *πευθῆν-ος*.

Lat. *carn-is*, and, with the strong stem, *homin-is homin-us*, *edōn-is*, Sab. *neriēn-is* (II § 115 p. 360); the old ending *-es* occurs in *Apolones* 'Apollinis', *C.I.L.* vol. I no. 187. In Umbro-Samnitic all consonantal stems took the ending of *i*-stems in the genitive, doubtless owing to a confluence of the nom. and gen. sing. in a certain number of words. So here we find the *-eis* of *i*-stems: Umbr. *nomner* 'nominis', Osc. *carneis* 'partis'.

O.Ir. *con* 'canis' for **cun-os*, and similarly *dercon* (nom. *derucc* 'acorn'), *āran* (nom. *āru* 'kidney'), *toimten* (nom. *toimtiu* 'opinion'); in Ogam inscriptions *Segamon-as*, *Inission--as*. On the other hand, neuter *n*-stems show in Old Irish the ending **-en-s* (**-ens *-ēs -e*, cp. I § 657. 6 p. 509), as *imbe* (nom. *imb n-* 'butter'), *anme* (nom. *ainm n-* 'name'); **-en-s* : **-n-es *-n-os* = **-eis* : **-i-es *-i-os*, see § 231 p. 119.

Goth. *gumin-s* O.H.G. *gomen gomin* 'of a man' (as to *-en -in* see Bremer, Ztschr. für deutsche Phil., XXII 249 f.), Goth. *tuggōn-s* O.H.G. *zungūn* 'of a tongue' (cp. § 218 p. 95). With the weak stem Goth. *managein-s* 'of a crowd' (II § 115 p. 362). It cannot be determined to what extent **-iz* = Idg. **-es* was the ending, and whether such an ending as **-az* = Idg. **-os* was or was not used along with it.

Lith. *szuñ-s*, and, with the strong stem, *akmeñ-s*, besides other examples; *-s* stands for **-es* according to vol. I § 664. 2 p. 522. O.C.Sl. *dĭn-e* 'of a day' (II § 114 p. 356), and, with the strong stem, *kamen-e*, with other examples; *-e* is for **-es* according to I § 665. 4 p. 525.

b. Root-nouns in *-m*. Pr. Idg. **dem-s* 'of a house': Skr. *dán* Avest. *dēnəg*, Gr. δεσ-, for **δεμς *δενς*, in δεσ-πότη-ς 'master of the house' (I § 204 p. 171, II § 160 p. 483). Skr. *kṣm-ás gm-ás jm-ás* Avest. *z^{e}m-ō*, Gr. χθονός transformed from **χθομ-ος* 'of the earth' (II § 160 p. 482).

§ 235. 7. Stems with suffixes in *-r*. Most of these have *-es -os*, along with which *-s* is found in Aryan, and as it would seem in Germanic too.

Skr. regularly has *-ur*, as *mātúr dátur*, probably for **-tr-s*,

see I § 288 p. 230[1]); in Avestic, to correspond, we find *ner^e^š* for **nr̥-s*, stem *n-ar-* 'man'. With the strong stem and *-s*, Avest. *nar-š*, *sāstar-š* 'of a ruler', cp. *ātar^e^-car-š* 'of him who produces fire'. Two Sanskrit words have been supposed to contain a genitive of this latter kind — Ved. *mātar-íśvan-* 'he who is lord over his mother', by Bartholomae (Bezz. Beitr. XIII 92), and Ved. *svàr (súvar)* 'of light' for **su̯ar-š* (I § 647. 7 pp. 493 f.) according to the conjecture of J. Schmidt (Pluralb. 223). The usual Avestic type is weak stem + *-as -ō*, as *brāþr-ō* 'fratris', *hamaęstr-ō* 'of an opponent'; similarly in O.Pers. *piša* 'patris' (I § 558. 4 p. 415). Avest. *sāstar-š* : *hamaęstr-ō* = Skr. *ávē-ṣ* : *ávy-as* and the like, see § 231 p. 119. The re-formate *nár-as* 'of a man' is due partly to its being from a monosyllabic stem *n-ar-*; cp. § 231 p. 120.

Armen. *maur* 'matris' for **mātr-es* or **mātr-os*, *ker* 'sororis' for **su̯esr-es* or **su̯esr-os* (I § 360 p. 276, § 561 p. 417). But *dster* 'of a daughter' has the strong stem, like Gr. Hom. *θυγατέρ-ος* beside *θυγατρ-ός*.

Gr. *μητρ-ός*; Homer uses forms such as *μητέρος πατέρος ἀνέρος* as well, which follow the strong cases (cp. Skr. *nár-as* following *nár-i*, § 231 p. 120). *δώτορ-ος* instead of **δωτρ-ος* follows *δώτορ-α*, and *δοτῆρ-ος* instead of **δοτρ-ος* follows *δοτήρ*.

Lat. *patr-is patr-us*, *mātr-is*, *frātr-is*; *datōr-is* instead of **datr-is* follows the nominative. In Umbro-Samnitic these stems have borrowed *-eis* from the *i*-stems (cp. § 234 p. 125): Umbr. *matrer* Osc. maatreís 'matris'.

O.Ir. *māthar* for **mātr-os* or **māter-os* (I § 77 p. 67).

Goth. *brōþr-s fadr-s*, O.Icel. *brōðr feðr*; the "mutated" vowel in the latter forms points to original **-tr-es*. Secondly, A.S. *brōðor feadur*, O.Icel. *fǫðor fǫður*, whose ending, like Skr. *-ur*, may be derived from **-r̥-s*. Thirdly, A.S. *fæder* O.H.G. *fater* have taken *-er* from the strong cases, like Gr. Hom. *πατέρ-ος*.

1) In this view of the forms in *-ur* I follow Bartholomae, Ar. Forsch. II 110. Others are mentioned by Collitz in Bezzenberger's Beiträge X 10: but they all have less to recommend them than this.

Other forms of the same kind as these last are Lith. *moteř-s* and O.C.Sl. *mater-e*.

§ 236. 8. Stems ending in Explosives. These regularly have *-es -os*.

Remark. There is no trustworthy ground for adding *-s* as another ending of these stems. In Vāj.-Saḥ. 20. 2 the form *vidyōt* is used as an ablative (= *vidyút-as*); and this is supposed to represent **vidyōt-s* by J. Schmidt (Plur. 223), see however Weber, Kuhn-Schl. Beitr. III 389, Böhtlingk and Roth's Sanskrit Dict. *s. v.*, Lanman, Noun-Inflection 468, Bartholomae, Stud. zur idg. Spr. I 77. The Latin genitive *nox* (XII Tables) is supposed by Stolz, Lat. Gr.[2] 337, to contain this ending.

Pr. Idg. **bhṛĝhn̥t-es -os* (**bhṛĝhn̥t-és*, cp. § 228 pp. 111 f.). Skr. *bṛhat-ás*, Avest. *ber^{e}zat-ō* and with the strong stem *ber^{e}zant-ō*; Skr. *bhárat-as* 'ferentis'. Gr. *ἰδόντ-ος φέροντ-ος*, with strong stem. Lat. *rudent-is*, *ferent-is*, *prae--sent-is*; it is doubtful to what extent *-ent-* is a simple phonetic developement from Idg. *-n̥t-* (II § 125 pp. 395 f., III p. 105 footnote 1). O.Ir. *lōchet* 'of lightning', *carat* 'of a friend', pr. Kelt. **-os*. — In Germanic, this is the ending of *o*-stems: Goth. *frijōndi-s* O.H.G. *friunt-es*. Balto-Slavonic has a *i̯o-* suffix: Lith. *vẽžanczio*, O.C.Sl. *vezą̨šta*.

Skr. *sarvátāt-as* 'of completeness', Avest. *haurvatāt-ō* 'of safety'. Gr. *ὁλότητ-ος* 'of wholeness'. Lat. *novitāt-is juventūt-is*, cp. O.Lat. inscr. *Salut-es*. O.Ir. *bethad* 'of life', pr. Kelt. **-os*. Goth. *mitaþ-s* 'of measure'.

Skr. *śarád-as* 'of autumn'. Gr. *φυγάδ-ος* 'fugacis'. Lat. *lapid--is*. O.Ir. *druad* 'of a Druid' pr. Kelt. **-os*; Irish Ogam inscr. *Deccedd-as*. Skr. *pad-ás* Gr. *ποδ-ός* Lat. *ped-is* 'of a foot'.

Skr. *uśíj-as*, stem *uśíj-* 'desiring'. Gr. *μείραϰ-ος* 'of a girl', *ὄρτυϰ-ος ὄρτυγ-ος* 'of a quail'. Lat. *bibāc-is*. O.Ir. *nathrach* 'of a water-snake' pr. Kelt. **-os*, Irish Ogam *Lugudecc-as* = O.Ir. *Luigdech* (nom. *Lugaid*). Skr. *vāc-ás* Gr. *ὀπ-ός* Lat. *vōc-is* 'of a voice, speech'. Skr. *-rāj-as* Lat. *rēg-is* O.Ir. *rīg* (pr. Kelt. **-os*) 'of a ruler'.

Skr. *ap-ás* Avest. *ap-ō āp-ō* 'of water'. Gr. *ϰλωπ-ός* 'of a thief'. Lat. *dap-is*.

In Germanic, genitives of this kind are on the whole

rare; most of those which occur belong to monosyllabic stems. We may cite as further examples the following: Goth. *naht-s* O.H.G. *naht* A.S. *niht* O.Icel. *nǣt-r* 'of night' for pr. Germ. **naχt-iz* = Lat. *noct-is*; Goth. *baúrg-s* O.H.G. *burg* A.S. *byrȝ* 'of a stronghold, city' for **burȝ-iz* = Avest. *ber^ez-ō (bar^ez-ō)* 'alti' O.Ir. *breg (*brig-os)* 'of a mountain'; Goth. *vaíht-s* 'of a thing'; A.S. *bēc* 'of a book' for **bōk-iz*. Paul, in his Beiträge VI 550, has put forth a conjecture which is worth considering although quite uncertain. He suggests that the Idg. ending **-es* has been preserved by the acute accent in such forms as O.H.G. *nahtes* adv. 'by night, of a night'. The *e* of *-es* would then be due to the influence of the *o*-stem ending (§ 239; and cp. Kluge, Paul's Grundr. I 354, 361, 385).

For O.C.Sl. *telęte* from nom. acc. *telę* 'calf', see § 244.

§ 237. 9. Stems in *-s*. The regular ending is *-es -os*.

Remark. Here, as in the preceding class (see § 236 Rem.), there are only uncertain traces of *-s*. The Vedic gen. *uṣás* 'of dawn', which we took to represent **uš-š-as*[1]), is regarded by J. Schmidt as standing for **uṣas-s*, and in the same way he refers *áṇhas* Rig-V. VI. 3. 1 to **ạhas-s* (Plur. 223). Against this explanation, see Bartholomae Stud. zur idg. Spr. 77 ff., and cp. § 356 Rem. below.

a. Pr. Idg. **menes-es -os* 'of a mind'; **ménes-os* according to § 228 pp. 111 f.; for the ablaut grade of the formative suffix, see II § 132 p. 413. Skr. *mánas-as*, *durmanas-as*; Avest. *manaŋh-ō dušmanaŋh-ō*. Gr. Ion. *μένε-ος* Att. *μένους*; Ion. *δυσμενέ-ος* Att. *δυσμενοῦς*. Lat. *gener-is*, *Vener-is Vener-us*; *dēgener-is*; *tempor-is* with *-o-* from the nom. acc. sing. neut. (II § 132 pp. 418 f.). O.Ir. *tige* (nom. *tech teg* 'house') = Gr. *στέγεος τέγεος*. Goth. *hatis* 'of hatred', see below. O.C.Sl. *sloves-e* 'of a word' = Skr. *śrávas-as*.

Other forms have a weak grade of formative suffix, as **mēn-s-es -os* 'mensis': Gr. Lesb. *μῆνν-ος* Att. *μην-ός*, Lat. *mēns-is*, O.Ir. *mīs*. Cp. II § 132 p. 415.

Greek Att. *Σωκράτου* beside *Σωκράτους* and the like, following *πολίτου*, cp. acc. *Σωκράτην* instead of *Σωκράτη* § 220

1) Above, II § 133 p. 423. And compare Bartholomae Stud. zur idg. Spr. I 20, 55.

p. 97, dat. *Σωκράτῃ* § 272. Also Lesb. *Θεογένη* on the model of stems in *ā*, like voc. *-γένε* (§ 209), acc. *-γένην* (§ 220), dat. *-γένῃ* (§ 272).

Gothic. *hatis* is once found, Ephes. 2. 3 *barna hatis* 'τέκνα ὀργῆς' in Ambr. B., whilst Ambr. A. has *barna hatizē*. The forms *hatiz-is*, *agis-is* (*agis* 'fear') etc. follow the *o*-stems. So also O.H.G. *ahir-es* (*ahir* 'ear of corn'); beside which are found *kalbes* (cp. *Kelbiris-bach*) *lambes*, which were made on the model of *worte-s* after the nom. acc. *kalb lamb* etc. had come, in the regular course of sound-change, to belong apparently to the same class as *wort*.

Perhaps Goth. *lambis* and like forms are to be classed with *hatis*. Because these words, like neuter *o*-stems, made their gen. sing. in *-is*, they came to be declined like them in other cases: nom. *lamb* etc. (Michels, Zum Wechsel des Nominalgeschlechts, I 17). To this one other factor may have contributed; namely, the practice of representing *es*-stems in composition by a corresponding form in *-o-* (Goth. *hráiva-*, Norse Run. *hlewa-* = *κλεο-*, see Burg, Runeninschr. 19, O.West.Germ. *requa-*, cp. II § 12 p. 28, § 40 Rem. 5 pp. 73 f.).

Old Church Slavonic. *slova* beside *sloves-e*, a reformation like O.H.G. *kalbes*, see II § 132 p. 422.

b. The gen. sing. belonging to the nom. in Idg. **-ōs* has this ending. Skr. *uṣás-as* Gr. *ἠοῦς* for **ἠό(σ)-ος* 'of dawn'. Lat. *honōr-is* with *ō* taken from the nom., like *datōr-is* § 235 p. 126.

c. Pr. Idg. **qreu̯əs-es -os* n. 'of flesh': Skr. *kraviṣ-as*, Gr. Att. *κρέως* for **κρεα(σ)-ος*.

d. Pr. Idg. comparative **ōk̑is-es -os* 'ocioris' (cp. II § 135 p. 429): Skr. *áśīyas-as* Avest. *āsyaŋh-ō*, Lat. *ōciōr-is* (like *honōr-is*, in *b.* above). In Greek we have *ἡδίον-ος* with *-i̯en-*. O.C.Sl. *slaždĭša*, extended by the suffix *-i̯o-*.

e. Pr. Idg. part. perf. act. **u̯ei̯dus-es -os* 'of him who knows': Skr. *vidúṣ-as* Avest. *vīdušō*. Greek *εἰδότ-ος*, with *-u̯et-*. Balto-Slavonic: Lith. *mìrusio* O.C.Sl. *mĭrŭša*, extended by *-i̯o-*.

f. Root-Nouns. Skr. *nas-ás* 'of a nose', Lat. *nār-is*. Skr. *ās-ás* Avest. *åŋəh-ō* 'oris', Lat. *ōr-is*. Skr. *mūṣ-as* (inferred from the nom. pl. *mū́ṣ-as*) Gr. *μυός* (instead of the strictly regular **μῡός*, see II § 160 p. 485) Lat. *mūr-is* 'of a mouse'.

§ **238.** 10. Lastly, the genitive of certain root-nouns whose root ends in *u̯* or *i̯* may be cited.

Skr. *nāv-ás* Gr. *νη-ός νεώς* (I § 611 p. 462) Lat. *nāv-is* 'of a ship'.

Skr. *rāy-ás* from *rā́-s* 'goods, wealth', Lat. *rēī* (cp. dat. *rēī*) a re-formate like *faciēī* § 230 p. 118.

Skr. *div-ás dyó-ṣ*, Gr. *Διϝ-ός*, Lat. *Jov-is*, from nom. Skr. *dyāú-ṣ* 'daylight', *Ζεύς*; O.H.G. *Zios* perhaps for **d(i̯)eu̯-s* = Skr. *dyó-ṣ* (cp. nom. *Zio* § 199 p. 80) and A.S. *Tīwes* = **di(i̯)eu̯-es*. Skr. *gó-ṣ*, and in the Veda *gáv-as* as well, Avest. *gēu-š gao-š*, Gr. *βο(ϝ)-ός* and a by-form *βος* in *Βόσ-πορ-ος* for **gu̯-os*, Lat. *bov-is*, O.Ir. *bou* (later *bō*) for **bou̯-os*, from **geu̯- *gou̯-* 'head of cattle'; O.H.G. *kuo*, and possibly A.S. *cȳ* (p. 80 footnote 1) from a form of the stem to be inferred from the acc. sing. and perhaps from the nom. sing. too (H.G. *kuo-* A.S. *cū-*), see § 199 p. 80, § 221 p. 98. Skr. *div-ás* Gr. *Διϝ-ός Βοσ-*: Skr. *dyó-ṣ gó-ṣ* = Avest. *hamaẹstr-ō* : *sāstar-š*, see § 231 pp. 119 f. Later re-formates are Lat. *Jov-is* A.S. *Tīw-es* Ved. *gáv-as* Gr. *βο(ϝ)-ός* Lat. *bov-is* O.Ir. *bou*, cp. Avest. *vay-ō* and like forms p. 120.

§ **239.** II. Formation of the Genitive in *o*-stems (cp. § 228 pp. 113 f.).

a. The Pronominal Endings *-si̯o* and *-so*. Pr.Idg. **u̯lq̑o-si̯o* 'lupi' (had nouns **-e-si̯o* beside **-o-si̯o*, as pronouns had? see §§ 418, 450). Skr. *vṛ́ka-sya*; Avest. *vehrka-hẹ*, Gāthic *vehrka-hyā* (I § 125 p. 115), O.Pers. *kāra-hyā* 'of a people, host'. Armen. *gailo-y* (I § 561 p. 417); the ending *-ay* in proper names, as *Trdatay* (nom. *Trdat*) *Maremay* (nom. *Mariam*) is perhaps the Iran. *-a-hi̯a* borrowed; however, it is not quite certain that Armen. *-oy -ay* have the origin here suggested; see below. Gr. Hom. *λύκοιο*; and, side by side with

this kind, forms like *Αἰόλοο* are shewn by the metre to be necessary (the MSS. have *Αἰόλου*), Hom. *Πηνελέωο* (nom. *Πηνέλεω-ς*) for **-ηοο* (I § 611 p. 462), Ion. Att. *λύκου*, Dor. *λύκω*.

Armen. *-oy* may or may not be one of these endings. What makes it uncertain is this. The ablative *-oy* can be referred to **-o-tos* (cp. Skr. *mukha-tás*), and it might then be assumed that the ablative form was used as genitive owing to the relation between pairs of forms like abl. *i zardu*: gen. *zardu*. Cp. § 244 p. 142.

In the Cyprian dialect of Greek occurs the ending *-ων*, as *ἀργύρων* = Att. *ἀργύρου*. It is usual to connect this with Arcad. *τω-νί* 'huius', in which case the ending will have been borrowed from the pronoun. But there are difficulties in the way of this view. Some assume that the ending *-οι* which is found in some parts of Thessaly (e. g. *χρόνοι*, *τοῖ*) comes from *-οιο*. This is hardly likely; it is far more probable that these were locatives used in the genitive sense (§ 263); see below, *b*.

**-e-so *-o-so* in Germanic. Examples of its use with pronouns are Goth. *þi-s* 'of this' *hvi-s* 'of which?' (§ 419). It doubtless did not pass on to the noun until the independent growth of Germanic had begun. The position of the word accent in the pronominal forms, **þé-so*, **χu̯é-so*, explains the breathed *s* (O.H.G. *wulfes* O.Icel. *ulf-s*) and the *e* (not *i*) of the ending *-es* in West Germanic (the *i* of Goth. *-is* did not arise until Gothic had split off and become independent). In Goth. and O.H.G. **-e-so*, Goth. *vulfis* O.H.G. *wolfes*. Old Norse **-o-so*, Norse Run. *Gōdagas* O.Icel. *ulfs* (beside *þess* 'of the, of this'). In the oldest documents of A.S., and still later dialectically, we find *-æs* = **-o-so*, as *dæʒæs* 'of a day', elsewhere *-es* = **-e-so*, *dæʒes*; so also in pronouns, *ðæs* and *ðes*.

b. Latin and Keltic *-ī*. Lat. *lupī*. The oldest specimens of the language have *-ī*; later we find both *-ī* and *-ei*, but the latter may be nothing more than another mode of writing the sound of *-ī*, as it is in *veivos* (I § 41 p. 38). The ending *-ī* in *i̯o*-stems dates back to the prehistoric period; e. g. *fīlī* (nom. *fīliu-s*), so also Falisc. *-ī*, as *Cēsī* 'Caesii'

(Deecke, Die Fal., p. 264). The ending *-iī* is later, and due to *-i-* passing into the genitive from the other cases; it first appeared in adjectives, afterwards in substantives. O.Ir. *fir* 'viri', *maicc* 'filii', Irish Ogam inscr. *maqi* (*-ī*?) = *maicc*, Gall. *Ategnati* (nom. *Ategnato-s*), and like forms. *i̯o*-stems: O.Ir. *cēli* 'socii' for **-i(i̯)ī*. In Umbro-Samnitic *o*-stems show the ending *-ei̯s*: Umbr. *popler* 'populi', Osc. sakarakleís 'sacelli'.

Two considerations make it not improbable *a priori* that this noun-genitive is a locative formation. These are (1) that in pronouns the Idg. locative in *-i̯* (*-e-i̯ -o-i̯*) is used from the proethnic stage onwards not only as a locative, but as a genitive (Skr. *mē* Gr. *μοὶ* etc., see § 447), and in particular the genitives Lat. *istīus* Osc. *eizeis* can be shewn to be transformations of original forms in *e-i̯* (§ 419); (2) Thessal. *χρόνοι* is a locative (see last page). It is quite permissible to refer Kelt. *-i*, i. e. *-ī*, to **-ei̯*, especially as examples of Gall. *-i* (*-ī*), for **-ai̯*, have been preserved (§ 247). This may perhaps explain the phonetic difficulties of the Latin forms. *fīlī*, a genitive in function, is locative in form, the suffix being Idg. *-ī* (*-ī-* is the weak grade form of *-i̯o- -ii̯o-*, as in the voc. *fīlī* and elsewhere, see § 201 p. 83); this formation would give an easy explanation of Lith. *-yje* in *žõdyje* (nom. *žõdi-s* 'word'). At the same time proethnic Latin had **lupei̯* in use, and the *-ei̯* of this, by association with *fīlī*, became *-ī* earlier than the same change took place elsewhere in the language; hence it is that *-i* is the regular mode of writing this termination in the earliest records of Latin. But in the Umbro-Samnitic branch *-ei̯* was kept, although it was extended, as it was in pronouns, by adding *-s*, and thus became *-ei̯s* (cp. O.Lat. gen. *mī-s tī-s* § 447); the result was that there was a confluence of *o-* and *i*-stems here (cp. Lottner, Kuhn-Schleicher's Beitr. II 311 f.).

Remark. Not much stress must be laid on the form *Zextoi* 'Sexti' found in a Faliscan inscription (Deecke, Die Fal., p. 180). In the two other proper names found in this inscription, *Voltio* 'Voltius' and *Folcozeo* 'Folcosius', *s* has dropped; and the same may have happened to *Zextoi*. **Zextois* would be parallel to *Ceises* 'Caesii' *Calitenes* 'Calitenii'. Or it

is quite conceivable that *-oi* is formed on the analogy of the *-ai* in *ā*-stems, as *Voltai* 'Voltae', in the same way as Lat. *equōrum* follows the analogy of *equārum* (§ 345), and loc. pl. Lat. Sabell. *-ōs* follows *-ās* (§ 357). Lastly, there is the possibility that the engraver has made a mistake.

c. Lith. *vilko*, O.C.Sl. *vlŭka*, doubtless an ablative form (§ 241). Side by side with this occur the following pronominal forms, Pruss. *ste-sse* O.C.Sl. *če-so* (§ 418).

Ablative Singular.[1])

§ **240.** This case had no form proper to itself in the parent language, except with *o*-stems. In these the ablative ended in *-ēd* and *-ōd*; in other stems the genitive and ablative had the same ending (§ 228 pp. 112 f.).

-ēd and *-ōd* are related in the same way as *-e-si̯o* and *o-si̯o* in the genitive singular, *-ei̯* and *-oi̯* in the locative singular, and *-ē* and *-ō* in the instrumental singular. Probably the *e*-vowel was originally used where the syllable carried the chief word accent (I § 311 pp. 248 f.). Oxytone ablative adverbs of the parent language ending in *-ēd* (lat. *facillimē*, cp. Skr. *apākád* 'from afar' from *ápāka-* 'distant') kept the *e*-vowel and its accent down to the time when the languages had begun to develope independently, just as in Greek we find the loc. adv. *ἀμαχεί* beside *ἄμαχο-ς*, in Armenian the instr. adv. *ardare-v* '*ἀληθῶς*'

1) Delbrück, Ablativ, Localis, Instrumentalis im Altind., Lat., Griech. und Deutschen, 1867. Zeyss, Über die in Ablativform erscheinenden italischen Präpositionen, Kuhn's Zeitschr. XVI 371 ff. Ritschl, Neue plautinische Excurse: Auslautendes *d* im alten Lat., 1869. Bergk, Beiträge zur lat. Gramm. I, Auslautendes *d* im alten Lat., 1870. Max Müller, Über Ablative auf *d* mit Locativbedeutung, Fleckeisen's Jahrbb. B. 113 (1876) S. 689 ff. M. Ruge, De ablativi in veteribus linguis Italicis forma et usu locali, Curtius' Stud. X 383 ff. Havet, L'ablatif des radicaux consonantiques (en latin), Mém. de la Soc. de lingu. VI 105 sqq. J. Schmidt, Die lat. Adverbia auf *e* von *o*-Stämmen und die Singulardative der germanischen Pronomina, Festgruss an Böhtlingk, 1888, S. 100 ff. Paul, Der Ablativ im German., in s. Beitr. II 339 ff. Bezzenberger, Lettische Ablative, in s. Beitr. IX 248 ff.

beside the living instrumental *ardaro-v* from the stem *ardaro-* 'just, right' (cp. J. Schmidt, Festgruss an Böhtlingk, pp. 100 ff.). But the case was different where the forms were not adverbs. Then *-ēd* and *-ōd* may have become independent of the difference in accent, which was originally the condition of the double form, even before the parent language split up at all.

In such pronominal forms as Skr. *má-d* 'a me', *-d* is the ablative suffix; so it is possible to analyse thus — **u̯l̥qē-d*, and to regard *-ē* as the third form of the strong grade (I § 311 p. 247). (Note that Johansson calls the formation in *-ēd -ōd* an instrumental in *-ē -ō* to which a further suffix *-d* has been added, Bezz. Beitr. XVI 136.) But it is also possible that *-ēd -ōd* first came about by contraction of the stem-final *-e -o* with *-a^x d*, whatever that may have been; and that *-a^x d* and *-d* were parallel forms bearing much the same relation to one another as *-es -os* and *-s* in the genitive singular (I § 115 p. 108).

The ablative of *o*-stems, as a noun-case proper, is fertile in Aryan and Italic; and also in Germanic and Balto-Slavonic, if Goth. *vulfa* and Lith. *vilko* O.C.Sl. *vlŭka* are really ablative forms. In Greek the only forms which preserve it are adverbs. In Armenian and Keltic it seems to have vanished utterly at the beginning of the historical period.

In Avestic and in Italic, the ablatives in *-ēd -ōd* which belonged to stems in *-o-* gave rise by analogy to *d*-ablatives in the other stems. This made it possible to make a distinction in form between the genitive and ablative of these stems, which had come down from the original language having the same suffix (*-es -os -s*).

In some languages the ablatival *-tos*, which belonged to adverbs, made its way into the noun system and became a fertile case suffix. This happened in Sanskrit, Armenian, and Greek, perhaps also in Slavonic. Cp. § 189 p. 66.

§ **241.** I. Original ablatives of *o*-stems ending in *-ēd -ōd*.

Pr.Idg. **u̯l̥qōd* (**u̯l̥qēd*) from **u̯l̥qo-* 'wolf', **jugēd* (**ju-gōd*) from **jugó-* 'yoke', cp. § 240. Skr. *vṛ́kād yugád*;

Avest. *vehrkāþ* O.Pers. *kārā* (I § 649. 6 p. 496) from *kāra-* 'people, host'. The ending *-ōd* (not *-ēd*) is indicated by Avest. *paskāþ* 'behind, along after' with *k* as compared with instr. *pasca* = Skr. *paścā́* with *c*, which therefore contains the Idg. ending *-ē* (§ 275). Greek: pronominal adverbs, Locr. ὦ ὅπω Cret. ὦ ὅπω 'unde'. Latin: old inscr. *Gnaivōd meritōd*, in the later language *Gnaeō meritō lupō jugō*, and many adverbs in *-ō*; Umbr. *pihaclu* 'piaculo' *somo* 'summo', Osc. sakaraklúd 'sacello'; *-ēd* in Italic only occurs in adverbs (cp. § 240), Lat. older inscr. *facilumed* i. e. *facillumēd*, later *facillumē rectē* Falisc. *rectēd*, Umbr. *rehte* 'recte' Osc. *amprufid* 'improbe' (*ē* becoming *ī* as in *ligud* 'lege' *licitud* 'liceto'). The following Germanic words may quite regularly represent ablative forms (see below): Goth. *vulfa juka*, O.Icel. *ulfe ulfi*, O.H.G. *wolfu -o*; and possibly we should class along with these ablatives Goth. *meina* O.H.G. *mīn* 'mine, my' (from the poss. *meina-*), which is genitive in use; see § 452. Lith. *vilko* O.C.Sl. *vlŭka*, see below.

In Avestic occurs *-āđa* as well as *-āþ*, as *xšaþrāđa* from *xšaþra-* n. 'lordship'; this was produced by accretion of the postposition *ā* = Skr. *ā́*, cp. the loc. pl. in *-hv-a* § 356. *-āþ* has been superseded by the ending of consonant stems (§ 242) in *yimaþ* (*yima-*, a proper name), cp. Skr. *yamā́d*.

Two explanations are possible of Greek adverbs of manner, such as τώς 'thus' (cp. Skr. *tā́d* 'thus'), ὦ-δε, ὡς, οὕτω οὕτως, καλῶς, after the analogy of which were built up similar adverbs from stems which had another final than *-o-*, as διαφερόντ-ως, βαρέ(ϝ)-ως, σαφέ(σ)-ως σαφῶς. They may be ablatives of the kind which we are now discussing, or they may be the instr. sing. in Idg. *-ō* (§ 275). It is hard to choose between these, since the meaning may be explained equally well on either supposition. If it were necessary to regard the ς- which appears in some of these forms as derived from Idg. *-d*, it could only be ablative. But it has never yet been proved that in any word *-ς* represents original *-t -d*. In all probability, *-ς* is a later addition, identical with the *-s* of ἄψ Lat. *abs*, ἀμφίς beside ἀμφί, O.Pers.

abi-š beside *abiy* 'to', *pati-š* beside *patiy* 'against' (cp. § 228 p. 112). See the Author, Kuhn's Ztschr. XXIV 74 f., XXVII 417; G. Meyer, Gr. Gr.[2] 294; Osthoff, Morph. Unt. II 53 f., IV 243.

Remark 1. I have hitherto been hostile to the view of Curtius (Stud. X 218 ff.) that in proethnic Greek **οὔτ̯ωτ* (**οὔτωδ*) became *οὔτως* before *τ-* and *σ-*, and that this form then came to be used regularly, no matter what sound followed. My reasons were as follows. (1) *οὔτως* is usual before vowels, but before consonants *οὔτω*. (2) When *-τ* (*-δ*) and *τ-* come together in Greek, *-ττ-* is the result, not *-στ-*, as *καττόν*. Such words as *ἅπαστο-ς ἴστε* are no exceptions, since the sounds heard in these words would be *-t^s^t-*, or something of the kind, even in the pre-Greek period (I § 469. 4 p. 345, § 490 p. 361), and I did not venture to derive (say) *τώς τό* from pr. Idg. **tŏt^s^tŏd*, i. e. *tŏd tŏd*. (3) **οὔτωτ σοι* would become **οὔτωσσοι*, as **πατσασθαι* becomes *πάσσασθαι*, and it seems to me incredible that this would be regarded as *οὔτως* + *σοί*; since *σσ* for the living language was a lengthened *s* and nothing more. But now Joh. Schmidt takes up the cudgels again for Curtius (Pluralb. 352 f.)[1]; and I must once more urge, against this theory, that so far the change of *-τ* (*-δ*) to *-ς* has not been made credible in any single instance. For Schmidt's own opinion — that Hom. *τῆος* is derived regularly from **τᾱϝας*, and so coincides with Skr. *tā́vat* — is indefensible; see § 225 Rem. 1 p. 106. I do not deny that it is *possible* that this **tŏt^s^tŏd*, or its like, once existed in the parent language, and that *τώς* *may* be derived from it. But my own hypothesis still seems to me to have far greater probability: namely, that we have here an adverbial sign *-ς*, which came down from the original language in certain forms, and in Greek overstepped its original limits. Schmidt himself admits the high antiquity of this *-s* e. g. in *ἀμφί-ς*, which (following Fick, Wörterb. I[3] 18) he compares with O.Pers. *abi-š*. For our present purpose, it is all one whether this *-s* is called, as Schmidt calls it, a neuter formative suffix, or compared, as it is in the text, with the sign of the gen.-abl. case. Yet another attempt to explain this *-s* has been recently made by Bartholomae, Stud. zur idg. Sprachgesch., I 75 f.

It is doubtful whether Gr. *ἐξ* Lat. *ex* is one of the forms which contain this adverbial *-s*, because it is possible that *ἐκ* and *ec*, wherever they occur, are simply short forms of *ἐξ* and *ex* made necessary by the sounds which happen to come next them (cp. the Author's Gr. Gr.[2]

1) Schmidt says that in Kuhn's Ztschr. XXIV 74 I have "passed over in silence the carefully considered view of Curtius". He has not observed that my essay is earlier than that of Curtius, since it appeared as early as May 1877 (it was the *Habilitationsschrift* for my appointment as Privatdocent). Schmidt says that "no one has yet assailed it": here he is wrong again, for I have indicated its weak points in Kuhn's Ztschr. XXVII 417.

pp. 71, 219). But in any case I am firmly convinced that the analogy of ἐξ gave rise to ἐνς (εἰς) as a by-form of ἐν. Schmidt contests this point too; but how he can say, as he does on page 358, that I have not explained why there is a difference in meaning between ἐνς and ἐν, or how he can speak as if I had given as the origin of ἐνς beside ἐν simply and solely the analogy of the relation between ἐξ and ἐκ, is a mystery to me; for in the very passage which he cites (Ber. der sächs. Ges. der Wiss., 1883, pp. 190, 194 f.) I have expressly said that ἐνς was coined as the opposite to ἐξ *as used with verbs of motion*, to which definition *only ἐν with the accusative* answers. The form of ἐν was affected in only one of its meanings, just as Skr. *páti-*, for example, makes the genitive *pátyur* when it means 'husband', but not when it means 'lord' (§ 231 p. 120); and cp. Gr. νεᾱνίᾱς : νεᾱνίᾱ § 190 p. 67, and Kuhn's Ztschr. XXVII 412. ἐνς may have been formed on the analogy of ἐξ, even if ἐξ had already its sentence-doublet ἐκ in use by its side; and the use of the pair of forms, ἐνς and ἐν, was not regulated by the use of ἐξ : ἐκ, because the newly coined ἐνς meant something different from ἐν with the dative.

Goth. *vulfa* O.Icel. *ulfe ulfi* may be derived, without violating any ascertained law of sound-change, not only from the abl. in *-*ēd*, but from the loc. in *-*oi̯* (§ 263), the instr. in *-*ē* (§ 275), or the dat. in *-*ē(i̯)* (§ 246); the Icelandic form may also be a dative in *-*ōi̯* (§ 246); and lastly O.H.G. *wulfu* may be instr. in *-ō* (§ 275). In these, and in other cases of the same kind, it must not be forgotten that a form may have had more than one origin, since as sound-change goes on, there is often a confluence of several inflected forms into one. But we can hardly doubt that a more thorough examination of the Syntax will often narrow the limits of choice, and shew that a given form has not so many different origins as we imagined.

Gothic adverbs in *-ba*, as *ubila-ba* 'evilly, ill' *hardu-ba* 'hard, very' if they belong to the same group as Skr. *sthūla--bhá-s* 'huge, massive' and the like (II § 78 pp. 216 ff.), are either abl. sing. or instr. sing. (§ 275). But it is a question whether *-ba* be not a particle (= Gr. φῇ 'how, as', cp. Höfer's Ztschr. II 204, Fick's Wörterb. I³ 686), added to the acc. sing. neut. used adverbially, and meaning 'somewhat, πως' or something of the kind.

The following pronominal forms are ablative: Goth. *hvamma* 'to whom' *hvammē-h* 'to each' (*-*ēd*) and O.H.G. *hwemu*

(*-*ōd*): Skr. *kásmād*[1]); the Gothic form may also be regarded as an Idg. dat. in *-*ē(i̯)* (§ 246). Cp. § 423.

The Balto-Slavonic forms *vil̃ko* and *vlŭka* have the meaning of a genitive as well as an ablative; see § 228 p. 113, § 239 p. 133. The derivation of Lith. *vil̃ko* (-*a* in some dialects, Lett. -*a*) from Idg. **u̯l̥qōd* is not without its difficulties. -*ō* makes us hesitate; -*ů* would have been expected (I § 92 p. 86). But there is no cogent reason for deriving it from **u̯l̥qād*, which would at once satisfy the known phonetic laws; and the last word has not yet been said on the representation of Idg. *ō* in Baltic. As we have also instances like *tvorà* : *tveriù*, *žolẽ* : *želù*, it seems best to put the matter provisionally thus: there is a confluence of Idg. *ō* and Idg. *ā* in Lithuanian and Lettic, under certain conditions unknown.

Remark 2. Bezzenberger's assumption (Bezz. Beitr. IX 248 ff.), that Lettic genitives such as *tõ* beside *tâ* (= Lith. *tõ*), *tiltu* beside *tilta* (= Lith. *tìlto*) contain an Idg. ablative in -*ōd*, is doubtless right. Leskien calls my attention to a double formation in the Lithuanian dialect of Velůna, which should be compared with this: namely *tů'*, *katrů'* beside *d*ᵉ*vu*.

§ **242.** II. Extended Use of the *d*-ablative in Avestic and Italic.

1. Avestic. *vehrkāþ* beside instr. *vehrka* dat. *vehrkāi* became the model, in prehistoric times, for the ablatives *barentyāþ haẹnayāþ* from the stems which make instr. *barentya haẹnaya* dat. *barentyāi haẹnayāi*. Now these same stems had gen. **barentyāh* **haẹnayāh* (which appear in the historical language as *barentyå haẹnayå*); accordingly, in connexion with the genitives **sūn-ah* **māþr-ah* **berᵉzat-ah* **manaŋh-ah* (in the historical language *sūn-ō māþr-ō* etc.) sprang up the ablatives*þ sūna māþraþ berᵉzataþ manaŋhaþ*; in the same way *bāzvaþ* and *bāzaoþ* were formed beside **bāzv-ah* (*bāzv-ō*) and *bāzao-š*, and *ažōiþ* beside *ažōi-š*. Cp. Bartholomae, Ar. Forsch. I 74 f.

1) For -*u* in *hwemu*, cp. § 198 Rem. 2 p. 80.

In these forms too we find *-d̄-a* instead of *-ḏ*; cp. § 241 p. 135.

Remark. It is not clear whether these analogical formations existed in Old Persian. In this language both *-d* and *-s* (*-h*) dropped (I § 649 p. 496); thus if there ever were such re-formations in *-d*, they could not be distinguished from gen.-abl. forms in *-s*. *taumāyā* (*taumā-* 'family'), which is used as an ablative, may be derived from either **-āyād* or **-āyās*, as far as form goes. The two forms were only distinguished in *i-* and *u*-stems, which made the gen. in *-aiš* and *-auš*; but in these stems no forms occur which could decide the question.

§ **243.** 2. In Italic it is probable that at least the beginning of the spread of the *d*-suffix dates from the proethnic period.

-ād: Lat. old inscr. *praidād sententiād*, later *praedā sententiā*; Umbr. *tota* 'civitate', Osc. *tovtad* 'civitate' suvad 'sua'. *-i̯ēd* (in Lat. and Umbr. this *-i̯ēd* and the ending *-i̯ē* of the instr. etc. have run together; see § 277): Lat. *faciē*, Umbr. uhtretie 'auctoritate', and similarly Lat. *rē* Umbr. *ri* 're' *re-per* 'pro re'. *-īd*: Lat. *marīd* (it is true that the authority for this form is the Columna Rostrata, but the word is correctly formed) *marī omnī* (*-ei* in the inscr. forms *omnei partei* is merely a way of writing the sound of *ī*, as it is in *veivos* I § 41 p. 38); Umbr. puni *poni pone* 'posca' Osc. *slaagid* 'loco, regione' Pelign. *fertlid* 'fertili'. It would seem that *-īd* spread from *i*-stems to consonant-stems in proethnic Italic: Lat. e. g. *air-īd cōventiōn-īd bov-īd portiōn-ī*, *corporī*, Falisc. *op-īd* 'ope', Umbr. peř-i *pers-i* 'pede', Osc. *praesent-id* 'praesente'.

This re-formation in *-ād -ēd -īd* sprang up in the same way as the Latin gen. pl. *-ōrum* on the analogy of *-ārum* (§ 345), and the Sanskrit nom. acc. pl. neut. *-īni -ūni* on the analogy of *-āni* (§ 339). At the same time, another circumstance seems to have aided this developement: the ablative and instrumental had already run together. In *o*-stems the ablative was used for abl. and instr., e. g. Lat. *cum fīliō* Osc. *com preivatud* 'cum privato (reo)'; and in consonantal stems the instrumental was used for instr. and abl., e. g. Lat.

(Gnaivōd) patre prognātus, Umbr. *pure* (in *pure-to*) 'ab igne' (cp. below). But in the plural also, instrumental and ablative had run together, and this may have had some influence — how much we cannot tell — upon the use of the singular. Suppose then that the *-ōd* of *o*-stems had added the function of the instrumental to its own (the genuine instr. in *-ō* can no longer be traced except in adverbs, Lat. *modŏ* and the like, § 275); it was a natural step to a new group of forms in *-ād -ēd -īd* beside the original instrumentals in *-ā -ē -ī* (§§ 276, 277, 278), the new forms being used for both ablative and instrumental. This hypothesis agrees well with the fact that in *ā*-stems as well as in *o*-stems the genuine instrumental is not found except in adverbial forms (§ 276). It was also all the easier for this re-formation in *-d* to spread, because in the plural, as well as in the singular, there were distinct forms for the genitive and the ablative (abl.-instr.).

In consonant stems, during the historical period, there was a struggle for the mastery between the abl.-instr. re-formation in *-īd* and the instrumental (also used for abl.) in (Lat. Umbr.) *-e*. In Latin, the forms in *-ī* grew gradually rarer, and gave place to those in *-e* (e. g. instead of *airīd* we find later only *aere*); but *-e* itself quite early came to be used with *i*-stems, as *ove parte* from the stems *ovi- parti-* (cp. acc. *ovem* following *ped-em* § 214 p. 92 and gen. *ovis* following *ped-is* § 231 p. 121). By degrees one or other of these two endings became regular for certain groups of nouns. But neither in consonant stems nor in *i*-stems did the exceptions quite disappear; and the rules laid down by Caesar and other grammarians only shew how impossible it is to get at the facts of a living language by studying the books of theorists. In Umbrian, at the date to which the existing monuments belong, the ending *-e*, which was also a locative suffix (§ 269), was the more common of the two; e. g. *nomne* 'nomine' *curnaṡe* answering to the Latin 'cornice'. In Oscan, on the other hand, beside *praesentid* there are forms in *-ōd*, *lig-ud* 'lege' tangin-úd *tangin-ud* 'sententia, consulto'. This

is the ending of *o*-stems, which has spread further; clearly because the two stems already agreed in the acc. sing. (*-om*) and gen. sing. (*-eis*). (See § 218 p. 95, § 231 pp. 118 f., § 239 pp. 131 f.).

Remark. It can hardly be that Latin consonant stems ever had an ablative ending *-ēd* (which, if it ever existed, must have been a contamination of *-ūd* and *-ĕ*). *dictatored* on the Col. Rostr., may be a false archaism (but as to the language of this inscription reference may now be made to Wölfflin, Sitzungsber. der k. bayer. Akad., 1890 pp. 293 ff.); and the length of the *-e* in poetry (Bücheler-Windekilde Grundr. der lat. Decl. 97) may be due to metrical reasons.

As regards *u*-stems, there are wide differences in the Italic languages. Lat. *-ūd*: *magistrātūd*, later *magistrātū*. But Umbr.-Samn. has the ending of *i*-stems: Umbr. trefi 'tribu' *fratrecate* 'magisterio', Osc. *castrid* 'fundo' from the stem whose the genitive is *castrovs*. Or did *ū* become *ī* under certain conditions in proethnic Umbro-Samnitic? It is doubtful how we are to regard Umbr. *maronato* beside *maronatei* 'magistratu' (see Bücheler, Umbr. pp. 173 sq.).

One more point remains to be noted. In Umbrian, fully formed ablatives, both singular and plural, often have -tu -ta *-to* affixed to them: as akru-tu 'ab agro' *pure-to* 'ab igne' *vapersus-to* 'a sellis'. A -tu -ta is also affixed in the imperative plural. Both are equally obscure.

§ **244.** III. The Adverbial Ending *-tos* used as a Suffix of the Ablative Case (cp. § 189 pp. 65, 66).

Sanskrit. Adverbs like *tá-tas* 'thence' *i-tás* 'hence' gave the type first of all for noun forms such as *mukha-tás* from *mukhá-m* 'mouth' (cp. Lat. *coeli-tus* from *coelu-m*). Now pronominal adverbs in *-tas* could be used as an ordinary case, e. g. *tátaḥ ṣaṣṭhád* 'from this sixth part'; hence nominal adverbs such as *mukha-tás* became part of the case system, and were used as ablatives. In Epic poetry they have become exactly parallel to the ordinary ablative, and could be used for singular and plural alike, as their adverbial origin would have led us to expect: e. g. *gurur garīyān pitṛtō mātṛtaś ca*

'the teacher is more honourable than father or mother', *bhayạ daṣṭribhyaḥ śatrutaḥ* 'fear of snakes, of enemies'. In Prākrit the use of this ablative formation (*-dō -du* = Skr. *-tō*) spread still more widely; see Lassen, Inst. linguae Pracr. pp. 302 sq.

Armenian. Examples of the ablative from stems in *i*, *u*, and consonants are: *i srtē* (*srti-* 'heart'), *i zardē* (*zardu-* 'ornament'), *y akanē* (*akan-* 'eye'), *i maurē* (*maur-* 'mother'. The ending of these according to Hübschmann (Armen. Stud. I 89) comes from **-e-tos* by an intermediate stage of **-ey* (I § 483 p. 357). In the same way, the *-oy* of *o*-stems, as *i gailoy*, may contain **-tos*, *-oy* being for **-o-tos*. Further, the genitive *gailoy* may have the same origin (cp. Gr. *-θεν* used as a genitive, Rem. 2 below). However, it is possible to derive *-oy* from **-o-si̯o*, and so the uncertainty does not at once disappear. Cp. § 239 p. 131.

The Greek gen.-abl. *ὀνόματος* corresponds to the Sanskrit *nā́ma-tas*; but it was attracted to the stem *ὀνομα-το-* (*ὀνόματα*, *ὀνομάτων*), which contains the formative suffix *-το-*, and together with it formed a system of *τ*-cases. See II § 82 p. 250. *οὔθατος ὕδατος στέᾱτος* etc. are genitives of the same kind, see II § 114 p. 350, § 116 p. 365. It also seems that the feminine stem *θέ-μιτ-* (: Skr. *dā-mi-*, II § 97 p. 289) was produced through a false analysis of *θέμι-τος*; see Fick, Bezz. Beitr. XII 7, Danielsson, Gramm. und etym. Stud. I 51. There are no nominal adverbs in *-τος*, no such form as (say) **θεό-τος* 'divinitus'; the explanation is that when *-τος* had become a case suffix, and was regularly used for that purpose, adverbs in *-τος* gave place to a new series in *-θεν* (*θεό-θεν*).

Remark 1. J. Schmidt gives an explanation of the *τ*-cases of *ὄνομα* which seems to me very unlikely (Pluralb. 187 ff.). He denies altogether the connexion of these with the suffix *-tos* and the Idg. *to*-extension of neuter *n*-stems. He believes that the nom. acc. sing. *ὄνομα* = Skr. *nā́ma*, and **φέρα* (the older form of *φέρον*) = Skr. *bhárat* eventually came to have the same ending; and that hence *ὀνόματος* *ὀνόματι* etc. were coined on the analogy of **φέρατος*.

Balto-Slavonic. Slavonic neuters in *-ę*, gen. *-ęte*, as *telę* 'calf', may belong to this class. *-t-* did not originally belong to

the inflexion of these words, as is shewn by certain parallel forms such as Russ. *telen-ok* 'calf' = O.C.Sl. **telenŭkŭ*, *mladen-ĭcĭ* 'youth, minor' (Pruss. *malden-iki-s* 'child') as compared with *mladę* 'child'. We should have to assume that **-tos* made its way into the case system, and that the result was a series of *t*-forms, at some period when there were parallel genitives in **-es* and **-os*. As the ending **-es* became regular for the genitive, **telęto(s)* was transformed to **telęte(s)*. Cp. also Pruss. *smunen-t-s* 'human being', acc. pl. *smunen-t-ins* beside *smūnen-isku* dat. 'human'.

Remark 2. In Greek, after the analogy of ablatival adverbs with *-θεν* (*-θε*), as ἔν-θεν κεῖ-θεν πό-θεν, ablatival adverbs were formed from nouns, e. g. ἀγρό-θεν, θεό-θεν, εὐνῆ-θεν; and these drove the older series in *-τος* (**ἀγρό-τος*) out of use (see last page). But these noun-adverbs never became exactly equivalent to the corresponding cases (the contrary is not proved by Hom. ἐξ οὐρανόθεν, ἀπὸ Τροίηθεν). But the pronouns ἐμέθεν, σέθεν, ἕθεν, which were formed on the same analogy, were doubtless fully incorporated into the case system; for in Homer they are used not only as ablatives, but as genitives, e. g. *B* 26 νῦν δ' ἐμέθεν ξύνες ὦκα, *υ* 42 Διός τε σέθεν τε ἕκητι, Aesch. Pers. 218 σοί τε καὶ τέκνῳ σέθεν.

Dative Singular.[1])

§ **245.** The suffix of this case was a diphthong consisting of some short vowel followed by *i*. With consonant stems it appears as *-ē* in Sanskrit, as *-αι* in Greek (infinitives, as ἴδμεν-αι, and we may conjecture in some adverbs with the ending *-ăι*, as παρ-αί beside loc. πέρ-ι instr. παρ-ά gen. πάρ-ος), as *-i* in O.C.Sl. (*synov-i* = Skr. *sūnáv-ē*, *-i* standing for **-ĕ*, cp. I § 84 p. 82, and to the works there cited, add Jagić, Archiv für slav. Phil X 191). From these we restore **-ai̯* (or **-əi̯*? see I § 109 pp. 100 ff.) as the proethnic suffix. It is

1) Delbrück, Über den indogermanischen, speciell den vedischen Dativ, Kuhn's Zeitschr. XVIII 81 ff. Bartholomae, Zur Bildung des dat. sing. der [ar.] *a*-Stämme, Bezzenberger's Beitr. XV 221 ff. Gerland, Über den altgriech. Dativ, zunächst des Singularis, Marburg 1859. Höfer, Der lat. Dat.-Locativ; in his Zeitschr. für die Wissenschaft der Sprache II 192 ff. Förstemann, Zur Geschichte altdeutscher Declin.: der dat. sing., Kuhn's Zeitschr. XVII 54 ff.

not quite so certain that *-ī* in Lat. *patr-ī* represents this dative **-ai̯* (§ 249). It is also doubtful whether the Irish dat.-loc.-instr. forms, such as *coin* 'cani', are datives in **-ai̯* (§ 251); perhaps they are all locatives in origin (cp. Gr. *κυν-ί*). Lastly, it is uncertain how we should regard the Lith. gerundive forms in the dative absolute, as *mán be-mẽgant(i)* 'whilst I slept' *mán parẽjus(i)* 'when I came home'. J. Schmidt would have them to be Idg. datives (Kuhn's Zeitschr. XXVI 260 f.); **-ai̯* would have become **-ë*, and this *-i* according to I § 664. 3 pp. 523 f.

Stems in *o*, *ā*, and *i̯ē* in the proethnic period had the endings **-ōi̯* (**-ēi̯*), **-āi̯*, **-i̯ēi̯*, contracted from *-o+ai̯* (*-e+ai̯*), *-ā+ai̯* (or *-a+ai̯*), *-i̯ē+ai̯* (cp. I pp. 106 f.). In *ā*-stems and *i̯ē*-stems dat. and loc. sing. had run together even then (§§ 264, 265).

Not all of the forms in Greek, Italic, Keltic, and Germanic which are classed as singular datives in the grammars are really dative. In both form and use there has been confusion with the locative, instrumental, or ablative. Hence great complications have arisen (cp. § 188); and many points in the history of the Indo-Germanic dative, locative, and instrumental forms in these languages remain dark for the present. When this is so, care will be taken that as complete a list as possible shall be given of all the possible ways in which any given form may be explained.

§ **246.** 1. *o*-stems. Pr. Idg. **u̯l̥q̑ōi̯*[1]), and doubtless **-ḗ(i̯)* also, as in the abl. sing. there were both **-ōd* and **-ḗd*, in the loc. sing. **-oi̯* and **-éi̯*, in the instr. sing. both **-ō* and

1) I do not consider it proved that a presumed **u̯l̥q̑ōi* could become **u̯l̥q̑ō* in Idg. Lat. *lupō* cannot be derived from such a form as **u̯l̥q̑ō*, if only for the reason that the Lat. dative *-ō* always remained long. I assume a loss of *-i̯* only for *-ēi̯* (and that perhaps only at the end of a sentence or clause); where the reason was that the two vowels of this diphthong were closely connected (cp. I § 645. 1 p. 489). But I do not deny that *i̯* may have dropped in *ōi̯* as well in the parent language. These sounds may have been differently treated at different periods, or when their position in a word was different. See I § 150 pp. 137 f.

*-ē̆ (§§ 240, 263, 275). Skr. -āi in the infinitive, e. g. the infin. in -dhyāi, as bhára-dhyāi, from the stem -dhya- (this ending is also pronominal, as tásmāi dat. of 'this'); Avest. -āi regularly, as vehrkāi. Sanskrit and Avestic have another ending -ā = Idg. *-ē(i̯), as Skr. sakhyā́ from sakhyá-m 'friendship' Avest. aša from aše-m 'what is just, justice'; see Bartholomae, Bezz. Beitr. XV 221 ff., J. Schmidt, Pluralb. 234 f. For Skr. vṛ́kāya see below. Gr. ἵππῳ; -ωι later on (in Attic in the second century B. C. or thereabouts) became -ω, Thess. -ον (I § 84 p. 84, § 132 p. 120); for the forms in -οι used in several dialects for the dative, see § 247. O.Lat. Numasiōi inscr., populōi Rōmānōi mentioned by Marius Victorinus; later on -ōi̯ became -ō, lupō jugō (I § 136 p. 123); Osc. Abellanúí 'Abellano', Umbr. Tefre Tefri Tefrei 'Tefro (deo)', cp. below. O.H.G. wolfe, O.Icel. ulfe ulfi, cp. below. Pruss. wirdai 'verbo' with -ai̯ = -oi̯, for *-ōi̯; Lith. viĩkui, cp. below.

In Sanskrit, nouns usually have -āya, as vṛ́kāya. Bartholomae (Handb. p. 95, Ar. Forsch. II 169, III 63) regards this as the old dative extended by -a, a byform of the postposition ā́, cp. Avest. fradaṯāi ā 'for assistance'. He conjectures that the same -a is contained in the locative ending Avest. -hv-a O.Pers. -uv-ā, although of course an original ā may be contained here (§ 356); and it may be the same as the affix -e in such locatives as Lith. rañkoj-e O.C.Sl. kamen-e (§§ 257, 264)[1]), cp. § 186 p. 62.

Umbro-Samnitic. Two things are possible. (1) It may be that in pr. Ital. -ōi̯ became -oi̯ before consonants (cp. Ital.

1) Bartholomae (loc. cit.) takes a to be a 'proclitic' by-form of ā in Avest. verbal compounds, such as a-sās-. In exactly the same way, Wackernagel now holds that ὀ- in ὄ-φελος ὀ-κέλλω is the 'weak grade' of ὠ- in ὠ-φελέω (Das Dehnungsgesetz, Basel 1889, p. 50). If so, ἐ- in ἐθέλω and words like it might belong to the same class. Are we then to postulate that this prefix in Idg. had four forms, ē : e and ō : o? That would doubtless mean ḗ é and ṓ ó, i. e. four strong-grade forms; for e and o could hardly be the weak grades of ē and ō.

-āi̯ and *-ai̯* in *ā*-stems, § 247), and that *oi̯* became the regular ending in Umbr.-Samn. If so, Umbr. -e -i *-ei* is related to Osc. -úí as the instr. pl. Umbr. -es *-ir -eir* is to Osc. -úís (§ 380). (2) Or *-ōi̯* became Umbr. -e -i *-ei* Osc. -úí in the Umbr.-Samn. period, and not before; in which connexion it should be remembered that ú may be read as *ō* or *ŏ*. It is probable that the Umbr. dative ending did not become identical with the locative ending which answered to Osc. eí, since the loc. is consistently written -e *-e*, e. g. uze *onse* 'in umero' (§ 263).

For the Irish *fiur*, used as a dative, see § 275.

Germanic. O.H.G. *wolfe* O.Icel. *ulfe ulfi* for **u̯ulfai̯*, *-ai̯* for *-oi̯ -ōi̯*, as in *ā*-stems *-ai̯* comes from *-āi̯* (§ 247). But it is possible to explain the O.Icel. form, along with Goth. *vulfa*, as a dative by deriving it from an Idg. *-ē* for *-ēi̯*. *ulfe* and *vulfa* may also be the ablative in **-ēd* (§ 241 p. 135) or the instr. in **-ē* (§ 275); *wolfe* and *ulfe*, and doubtless Goth. *vulfa*, may be loc. in **-oi̯* as well (§ 263).

Goth. *hvamma* dat. of 'who' *blindamma* dat. of 'blind' (cp. *hvammē-h* dat. 'each') may contain the Idg. dative ending *-ē(i̯)* (cp. Skr. *kásmāi*); but they may also be ablative like O.H.G. *hwemu blintemu* (§ 241 pp. 137 f.).

Balto-Slavonic. Lith. *-ui* in *vilkui* arose (1) either at the end of a clause or sentence and when a sonant was the next sound following (cp. *vilkaĩs* = Idg. **u̯lq̥ōi̯s* § 380), or (2) in accordance with Leskien's Law of Shortening, stated in vol. I § 664. 3 pp. 523 f.

The O.C.Sl. dative *vlŭku* (pronouns also have *-u*, as *tomu*) cannot be derived from anything but pr. Slav. **-ou̯* so far as we can tell from what is at present known of sound change in Slavonic. I do not know what to make of this form.[1]) It recals the adverbs *tu* 'there' *onu-de* 'ἐκεῖ'.

§ 247. 2. *ā*-stems. Pr. Idg. **ek̑u̯āi̯*. Skr. Ved. *suv-apatyāí* from *suv-apatyā́-* 'a woman who has fair offspring'; but

1) Wiedemann derives this *-u* from Idg. *-ōi̯* (Das litau. Präteritum I 47). How this is to be supported I do not see.

cp. below. Gr. *χώρᾳ*; the *-i̯* of *-āι* dropped later on, just as did that of *-ωι* (§ 246, last page). O.Lat. *Mātūtā*, later *equae*; Umbr. tute *tote* 'civitati' Osc. deívaí 'divae'. O.Ir. *mnāi* from nom. *ben*; *tuaith*, **-āi̯* becoming first **-ai̯* and then **-ī* (*-i* in *soillsi* was previously **-iī*); it is worth remarking that *-ī* is found even in Gallic, *Βηλησαμι* from nom. *Belisama* (cp. § 239 p. 132). Goth. *gibái* A.S. *ʒiefe*, and cp. the pron. Goth. *þizái* dat. fem. of 'this' as contrasted with Skr. *tásyāi* (cp. § 263 Rem.). Lith. *rañkai* O.C.Sl. *rącě* (I § 84 p. 82, § 664. 4 p. 524, § 665. 3 p. 525).

Aryan. The usual ending is Skr. *-āyāi*, Avest. *-ayāi*, as *áśvāyāi haẹnayāi*, a re-formation of the same kind as the gen. sing. Skr. *-āyās* Avest. *-ayå*, see § 229 p. 115, § 264. The shorter ending *-āi* is only found in *i̯ā*-stems. In Avest. *-yāi*, *gaẹþyāi* from *gaẹþyā-* f. 'earthly', there need be no scruple whatever in assuming that *-yayāi* has been shortened by dissimilation; and the only question is whether in Vedic *suvapatyāí*, *-yāi* has not been shortened from *-yāyāi* in the same way (see I § 643 p. 482, and J. Schmidt, Kuhn's Ztschr. XXVII 383); cp. also gen. loc. du. *yóṣ̌* beside *yáyōṣ̌* etc. in § 307 and § 422. But in any case the old ending *-āi̯* was kept by pronouns: Skr. *kásyāi* Avest. *kahyāi* (§ 425).

In Greek we find *-ᾰι* in place of *-āι* as we find *-οι*, the locative ending, in place of *-ωι*. This *-οι* is found in Boeot. (*-οε*, *-ῡ*; see I § 80 p. 72), Arcad.-Cypr., Elean, and N.-W. Greek; *-ᾰι* is certain for Boeotian (*Πλαύχαε*, *ϝελατίη*, see I § 96 p. 90), and so it was doubtless found in the other dialects which had *-οι* instead of *-ωι*; it should be remembered that *-AI* may represent either *-ᾰι* or *ᾱι*, as far as the letters go. In proethnic Greek, *o*-stems had *-ōi̯* (Idg. dat. form) for dat. and instr., and *-oi̯* (Idg. loc. form) for locative; but *ā*-stems had *-āi̯* (Idg. dat. and loc.) for both dative and locative (the ending of the instr. was doubtless the Idg. form in *-ā*, see § 276). *-ōi̯* and *-āi̯* became *-oi̯* and *-ai̯* in pr. Greek before words beginning with a consonant (I § 611 p. 461); and thus in *o*-stems the dat. (-instr.) form became sometimes

identical with the locative, whilst the *ā*-stems developed a form which seemed to be of the same kind as the Idg. locative in *-oi̯*, and this accordingly absorbed the special locative uses.[1]) By this time the boundary line between dat. (-instr.) and loc. was partly obliterated in *o*-stems, and in *ā*-stems the state of things was much the same. After this both classes of stems moved on side by side in the same direction: in one group of dialects, as Ion.-Att., *-ῳ* and *-ᾳ* absorbed *-οι* and *-ᾱι* in the declensions, so that these survived only in adverbs and certain fossil forms (e. g. *οἴκοι*, *Θηβαι-γενής*); while elsewhere, as in Boeotian, *-οι* and *-ᾱι* gained the day.

Italic. O.Lat. *Mātūtā* for pr. Ital. *-āi̯*, which answers to *-ōi̯* in *Numasiōi*. Whether *Menervai* and similar forms of the oldest inscriptions have preserved this diphthong it is impossible to decide, because *-AI* may be differently read. *-āi̯ -ae̯*, the regular ending in classical Latin (e. g. *equae*), is the anteconsonantal form of proethnic Italic (I § 612 p. 462), and was also the ending of the locative (§ 264). This form *-āi̯* has become the regular ending in Umbr.-Samn. also; and here too it is impossible to trace any distinction in form between dative and the locative (see § 264).

Ennius has *terrāī* as a dative (cp. *-āī* gen., § 229 p. 116); apparently in consequence of the use of the same form in *-ēī* (*i̯ē*-stems) for both genitive and dative (§ 230 p. 118, § 248).

§ **248.** 3. *ī-* *i̯ē*-stems (cp. p. 68 footnote 1). Pr. Idg. **bhr̥ĝhu̯t-(i)i̯ēi̯*, and doubtless *-(i)i̯ē* at the same time, 'celsae' (cp. the locative § 265). Skr. *bṛhatyāí*, Avest. *barentyāi*. Lat. *faciē*, Umbr. kvestretie 'quaesturae' (and therefore O.Lat. *rē*

1) *-āi* before sonants, and *-āi* before consonants, survived side by side: just as in certain dialects we find both *-ονς -ανς* before sonants, and *-ος -ας* before consonants, in the acc. pl. of stems in *o* and *ā* (§§ 326, 327).

Umbr. ri 'rei') can be explained as coming from Idg. *-(i)i̯ē, cp. § 265; a second form is *faciī* (as in the gen. sing., § 230 p. 118), whose -*iī* may be from pr. Ital. *-(i)i̯ei̯ for *-(i)i̯ēi̯, just as -*ai̯* in *ā*-stems came from -*āi̯* (§ 247, last page); for the third form *faciēī* see below. Mid.Ir. *Brigti*, *insi*; -*i* for *-*iī*, and this for -*(i)i̯ēi̯ or *-(i)i̯ē; the form may also be regarded as locative (§ 265) or instrumental (§ 277). Lith. *žẽmei* O.C.Sl. *zemlji* for *-*i̯ei̯* (I § 68 p. 60, § 147 p. 131), and this for *-*i̯ēi̯*, just as in *ā*-stems *-*ai̯* comes from -*āi̯* (§ 247 pp. 147 f.).

Italic. Side by side with Lat. *faciē* and *faciī* is the form *faciēī*, which has got the ending -*ī* from consonant stems, perhaps following *rēī* (cp. Skr. *rāy-ē*). Are we to regard Osc. Kerrí Pelign. *Cerri* 'Cereri' as the dative of a similar stem?

O.Ir. *inis* beside *insi* is an *i*-stem form (§§ 260, 278), like the gen. sing. *inseo* (§ 230 p. 118).

Goth. *frijōndjai* could no doubt be derived from *-*i̯ēi̯* (cp. *anstai* § 260); but it must surely be a *i̯ā*-stem form like other cases, e. g. gen. *frijōndjōs*. Greek Att. φερούσῃ ἀληθείᾳ and Lith. *vẽžancziai* must certainly be assumed to be *i̯ā*-forms. Cp. p. 68 footnote 1.

§ **249.** 4. *i*-stems. Different endings are found in different branches of the language: -*ei̯-ai̯*, -*(i)i̯-ai̯*, -*ī*. But how these are historically related is not clear; nor is it clear how matters stood in the parent language. Probably -*ei̯-ai̯* : -*i̯-ai̯* = -*men-ai̯* : -*mn-ai̯* (§ 251).

Aryan. Skr. *ávay-ē* Avest. *ažayaę-ca ažēę* (cp. Bartholomae, Handb. § 93 p. 40, § 224 p. 89); in the infinitive, Skr. *pī-táyē* 'to drink' Avest. *ker*^{e}*-tēę* 'to complete' (II § 100 p. 298), etc. Some exceptional forms have -*i̯-ai̯*: Skr. *páty-ē* 'husband' (dat.) Avest. *paiϑyaę(-ca)* 'lord, ruler' (dat.), an irregularity which must be explained along with the irregular Skr. instr. *pátyā* loc. *pátyāu* gen. *pátyur*; see § 231 p. 120, §§ 260, 278.

In Ved. and Avest. are feminines with *-ī*: Ved. *ūtī́* from *ūtí-* 'help' Avest. *fra-mrūiti* 'for recitation', obviously the instr. form (§ 278). Bartholomae fixes pr. Aryan as the period in which this form got a dative meaning (Bezz. Beitr. XV 245 f.); but it appears to have had this meaning, as well as that of the instr., in the parent language. O.C.Sl. *-ī* in *nošti*, *pa̯ti* (*pa̯tĭ* m. 'way') cannot be explained without violence in any other way than by referring it to this *-ī*; the same may be said of O.Lith. *vësz-paty* (stem *vësz-pati-* 'lord'). Again, we must doubtless see Idg. *-ī* in such forms as Lesb. Boeot. Dor. Ion. *βάσī πόλī* (cp. §§ 266, 278), which are used for the dative amongst other things; besides which Lat. *ovī* and O.Ir. *fāith* may have the same (see below).

In Sanskrit there are feminine forms in *-yāi*, *ávyāi*, a re-formation like gen. *ávyās* (§ 231 p. 120), loc. *ávyām* (§ 260). Compare § 278.

Lastly, we may perhaps add Avest. *mrūitē̯ āraē̯-cā* instead of *mrūitēē̯ ārayaē̯-cā*, and the like (Geldner, Kuhn's Ztschr. XXVII 226 ff.).

Remark. (1) Did this ending arise by syllabic dissimilation before words beginning with a sonant (*-ai̯* for *-ai̯ai̯*)? (2) Or was it a re-formation on the model of consonant stems, dating from some period when there were nouns declined both as consonant stems and as *i*-stems, such as abstract nouns in *-tāt(i)-* II § 102 p. 309 (cp. Lat. gen. *ov-is mort-is* § 231 p. 121, Lith. gen. *krūt-ā* §§ 348, 402, and the like)? (3) Or lastly, is Bartholomae right in explaining the forms as locative (Kuhn's Ztschr. XXVIII 21, Bezz. Beitr. XV 241)? Cp. § 260 Rem.

In Greek, there are no examples of real datives of *i*-stems. For Lesb. etc. *βάσī* see above.

Italic. In explaining the forms called dative according to the traditional classification of the grammars, consonant stems and *i*-stems must be considered together, since no line can now be drawn between them in this respect in any Italic dialect. Latin from the earliest period has *-ei -ī*, as *ovei ovī* from the stem *ovi-*, *patrei patrī* from the stem *patri-*. Also *-e* (quantity doubtful) in the oldest remains of Latin; but amongst the examples found — *Salūte patre* etc. — there is

none which can with certainty be referred to an *i*-stem. Umbr. *-e*, more rarely *-i*: *Tarsinate* 'Tadinati' (stem. *Tarsinati-*) patr-e '*patri*', Marti 'Marti' Iuvi-p. 'Iovi patri'. Osc. -eí, as Herentateí 'Veneri, Volupiae', Diúv-eí 'Jovi'; but not a word amongst them which can be certainly regarded as an *i*-stem (for Herentateí cp. p. 119, footnote).

Of these endings the Osc. -eí is the least obscure. It is the locative ending of the *i*-declension, derived from Idg. **-ēi̯* (§ 260) or **-e(i̯)-i* (§ 266) — the spelling *'Απελλουν-ηι* 'Apollini' does not prove that the e of -eí is long. -eí passed on to consonant stems in the same way as -eís in the gen. maatr-eís (§ 235 p. 126) etc. Umbr. *-e -i* may be identified with Osc. -eí; and considering the similar genitive formation in the two dialects (Umbr. *matrer* = Osc. maatreís) this view is in itself the most probable, although it is possible that *-e* in karn-e 'carni' *nomn-e* 'nomini' etc. may come from **-ai̯*, the dative suffix (for the phonetics of this cp. the loc. sate 'in sancta' §§ 247, 264), and *-e* in *ocre-m ocre* 'in ocre' from the loc. **-ē* (§ 260). And Latin *-ei -ī* may be the same ending as Osc. -eí. But if infinitives such as *ag-ī da-r-ī* are datives like Skr. *-áj-ē ji-ṣ-é* (II § 162 p. 490), and the 2nd. pl. imper. *legimin-ī* answers to the Gr. inf. *λεγέμεν-αι* (II § 117 p. 373), then *patr-ī*, *su-ī*, *socru-ī* cannot be separated from Skr. *pitr-é*, *bhruv-é*, *śvaśrúv-ē*. They would then be datives in Idg. **-ai̯*.[1] Now comes the question whether *-ī* has a different origin in *ovī* and *patrī*. Is it the locative of an *i*-stem in *ovī*, the dative in *patrī*; or was *ovī* an ad-formate of *patrī* as were the gen. sing. *ov-is* of *patr-is* and the acc. sing. *ov-em* of *patr-em* (§ 231 p. 121)? There is another possibility; *-ī* in *ovī* may be the same as *-ī* in Skr. *ūtí*, see p. 150. O.Lat. *-e*

1) I prefer to keep to the view that Lat. *ai̯* in final syllables under certain conditions became *ī*, Torp's protest notwithstanding (Torp, Beitr. zur Lehre von den geschlechtlosen Pronomen, 1888, pp. 15 ff.). At the same time, I admit that Osthoff's statement of the phonetic laws upon which this depends may perhaps be incorrect (see Zur Gesch. des Perf., 193 ff.).

may be regarded as Idg. *-ē(i̯)*, the ending of the locative in *i*-stems; a view which is supported by the adverb *peregre* (stem *peregri-*); see § 260.

O.Ir. *fāith*, if it is the dative, can be compared only with Skr. *ūtí* (see p. 150). Cp. §§ 260, 278.

Lith. fem. *nãkcziai nãkczei* certainly has not the Idg. dative *-i̯-ai̯*; but here we have a re-formation after the analogy of *-i̯ā*-stems, e. g. *vaĩdžiai vaĩdžei* from nom. *valdžiù valdžè* 'government' (§ 247 p. 147), in the same way as the masc. *vãgiui* (nom. *vagì-s* 'thief') followed the model of a stem in *-i̯o-*. O.Lith. *vësz-paty* beside Skr. *ūtí*, similarly O.C.Sl. *nošti pa̯ti*, see p. 150.

§ **250.** 5. *u*-stems. Of these much the same may be said as of *i*-stems, see § 249. The endings are *-eu̯-ai̯* *-(u)u̯-ai̯*.

Remark. No probability can be made out for the theory that the Idg. instr. in *-ū* could be used as a dative even in the parent language. As to the dative use of Lat. *manū ūsū* O.Ir. *biuth*, see §§ 261, 279.

Aryan. Skr. *sūnáv-ē* Avest. *bāzav-ē̯* like O.C.Sl. *synov-i*; infin. Ved. *śrṓ-tavē* 'to hear', and the like (II § 108 p. 327). More rarely **-u̯-ai̯* : Ved. *śíśv-ē* (*śíśu-* 'child, young creature'), *sahásrabāhuv-ē* (*sahásrabāhu-* 'thousand-armed'), Avest. *xraṗw-ē̯* (*xratu-* 'will, strength') = Ved. *krátv-ē*. Skr. feminine forms in *-v-āi*, *dhēnv-āí*, a re-formation like gen. *dhēnv-ás* loc. *dhēnv-ā́m* (§ 232 p. 122), cp. § 279.

Lat. *manuī* (inscr. *senātuei*) for **-eu̯-ai̯* (pr. Ital. **-ou̯-ai̯*, see I § 65 p. 52, § 172. 1 p. 152) or for **-u̯-ai̯* (see I § 170 p. 149). Cp. *senātu-is* § 232 p. 122, *manu-um* § 349.

Lith. *súnui* doubtless follows *vilkui* (§ 246 p. 146), as the loc. pl. *sūnůsè* follows *vilkůsè* (§ 326 Rem., and § 360). O.C.Sl. *synov-i* with *-ou̯-* for *-eu̯-* (I § 68 p. 59) = Skr. *sūnáv-ē*.

§ **251.** Nasal Stems.

Stems with *n*-suffixes have usually the weak grade form. But the *men-* and *u̯en*-stems from which infinitives are made

seem to have had strong-grade forms even in the proethnic period: Skr. *dā́-man-ē* Gr. *δό-μεν-αι* Lat. 2. pl. imper. *da-min-ī*, Skr. *vid-mán-ē* Gr. *ἴδ-μεν-αι*, Skr. *dā-ván-ē* Gr. Cypr. *δο-ϝεν-αι* Att. *δοῦναι*, Avest. *vīd-van-ōi* Gr. *εἰδ-έν-αι*; see II § 116 p. 363, § 117 pp. 366, 367, 371, 373, and for the accent, Wheeler Der griech. Nominalaccent pp. 57, 58. Compare the Idg. strong-grade stem in *-ei̯-ai̯* (*i*-stems) and *-eu̯-ai̯* (*u*-stems), §§ 249 and 250; and *-es-ai̯* in *es*-stems (§ 254). Observe also that these are just the endings which are found in infinitives: Skr. *pī-táy-ē* Avest. *ker*^{e}*-tēę̄*, Skr. *śrṓ-tav-ē*, *bhiy-ás-ē* *dōh-ás-ē*. The strong stem may have come from the locative, which was also sometimes used for the infinitive; e. g. Gr. *δόμεν* Skr. *śūṣáṇ-i*, Lat. *vīver-e*.

Pr. Idg. **k̂un-ái̯* 'cani', **u̯id-mén-ai̯* 'for learning'.

Skr. *śún-ē* (for the accent, see p. 70 footnote 2), Avest. *sūn-ę̄*. Skr. *tákṣṇ-ē* Avest. *tašn-ę̄* (*tákṣan-* *tašan-* 'sculptor, carpenter'). Skr. *áśman-ē* Avest. *asman-ę̄* (*áśman-* *asman-* 'stone, heaven'). Skr. inf. *vid-mán-ē* 'for learning, for knowing', *dā-ván-ē* 'for giving', see above. Sometimes the strong stem took the place of the weak, even at a later period, e. g. Ved. *aryamáṇ-ē* beside the earlier *aryamṇ-ḗ* (*aryamán-* 'friend, comrade'), and similarly Avest. *airya-mainę̄* (*airya-man-* 'tractable'), also Avest. *urvān-ę̄* beside *urun-ę̄* (*urvan-* 'soul'). Cp. § 234 p. 124.

In Greek, datives of this kind survived only as infinitives. Inf. in *-μεν-αι*, Epic and Lesbian, as *ἴδμεναι* *ζευγνύμεναι*, II § 117 p. 371. Inf. in *-ϝεν-αι* is more general (II § 116 p. 363): Cypr. *δοϝεναι* (accent uncertain) Att. *δοῦναι*, also *ἰέναι* for **ἰ-ϝεναι*, *ἀῆναι* for **ἀη-ϝεναι*: from these *-ναι* was detached, as though it were the inflexional ending, and this, spreading most widely in Ion.-Att., ended by usurping the place of *-μεν(αι)*; thus arose e. g. *δῦ-ναι* *διδό-ναι* *τεθνά-ναι*; *εἶναι* Arcad. *ἦναι* is not for **ἐσναι*, but *εἶμεν* *ἦμεν* (for **ἐσ-μεν*) has been transformed at one step into *εἶναι* *ἦναι* through the analogy of this set of forms. *εἰδέναι* is doubtless equivalent to Avest. *vīd-van-ōi*, but the perfect ending *-έναι* may in some words

belong to Idg. *-en*-stems, say in *εἰκέναι* cp. *εἰκών* (the Author, Morph. Unt. III 19 ff.; Johansson, De der. verb. contr., 202 sq.)[1]).

Lat. *carn-ī*, and, with the strong stem, *homin-ī edōn-ī mentiōn-ī*. The 2nd. pl. imperative in *-minī*, as *sequiminī*, was doubtless an infinitival dative; see II § 117 p. 373. It is not at all probable that Umbr. karn-e 'carni' and the like have this formation; see § 249 p. 151.

O.Ir. *coin* 'cani' may come from **cun-ai̯*, and similarly *ārain (āru)* 'kidney' etc. But the same forms may be explained as locatives (§ 269).

Lith. *szùn-iui* follows the analogy of stems in *-i̯o-* and *-i-* (§ 246 pp. 145 f., § 249 p. 152), and so do *ăkmen-iui* etc. Whether O.C.Sl. *kamen-i* contains the dative suffix *-ai̯* (cp. *synov-i* § 250 p. 152) or the ending of *i*-stems (§ 249 pp. 149, 151), is not clear.

It so happens that no example of the dative of any root-noun in *-m* has been preserved in Aryan. We are justified in inferring that there were such forms as Skr. *gm-ḗ jm-ḗ* Avest. *zᵉm-ḛ̄* from Skr. *kṣam-* Avest. *zam-* 'earth', Avest. *zim-ḛ̄* from *zyam-* 'winter' cp. Lat *hiem-ī*; see II § 160 pp. 482 f.

§ **252.** 7. *r*-stems. Pr. Idg. **mātr-ái̯* 'matri', **dṓtr-ai̯* 'datori'. Skr. *mātr-ḗ dátr-ē*, Avest. *māϑr-ḛ̄ dāϑr-ḛ̄*. Lat. *mātr-ī datōr-ī* (*-ōr-* comes from the nom. sing.); it is not very probable that Umbr. ař-fertur-e 'infertori, flamini' belongs to the same class, see § 249 p. 151. O.Ir. *māthir* may be derived either from **mātr-ai̯* or from **māter-ai̯*, and it may also be explained as locative (§ 269). O.C.Sl. *mater-i* is obscure just as *kamen-i* is; see § 251, above.

Lith. *móter-iai móter-ei* follows the analogy of *i̯ā*-stems (§ 247 p. 147).

§ **253.** 8. Stems ending in Explosives.

Pr. Idg. **bhr̥ǵhn̥t-ái̯* 'celso'. Skr. *bṛhat-ḗ*, Avest. *berᵉzaitḛ̄* and (with the strong stem) *berᵉzantḛ̄*; Skr. *bhárat-ē* 'ferenti'.

1) The same dative suffix is found in *φέρεσϑ-αι* (*-ϑ-αι* = Skr. *-dh-ē*) according to Bartholomae's convincing explanation (Rhein. Mus. XLV 151 ff.).

Lat. *rudent-ī ferent-ī prae-sent-ī* — but it is not certain how far this *-ent-* was directly derived from Idg. *-u̯t-* (II § 125 pp. 395 f., III p. 105 footnote 1). O.Ir. *carit* 'amico' dat. and loc. (§ 269). O.C.Sl. *telęt-i* (from *telę* neut. 'calf', cp. § 244 pp. 142 f.) like *kamen-i*, see § 251, last page.

Skr. *sarvátāt-ē* 'to or for completeness', Avest. *haurvatāit-ę̄* 'to or for safety'. Lat. *novitāt-ī*, *juventūt-ī*. O.Ir. *bethid* (from *beothu* 'life') dat. and loc. (§ 269).

Skr. *śarád-ē* 'to or for autumn', Avest. *armaę-šāiđę̄* from *armaę-šāđ-* 'sitting still'. Lat. *lapid-ī*. O.Ir. *druid* 'to or for a Druid' dat. and loc. (§ 269). Skr. *pad-é* Lat. *ped-ī*.

Skr. *uśíj-ē*, stem *uśíj-* 'desirous'. Lat. *bibāc-ī*. O.Ir. *nathraig* 'water-snake' dat. and loc. (§ 269). Skr. *vāc-é*, Lat. *vōc-ī*. Skr. *-rāj-ē* Lat. *rēg-ī*, O.Ir. (dat. and loc.) *rīg*.

§ **254.** 9. Stems in *-s*.

Pr. Idg. **menes-ai̯* 'to or for the mind' (for the form of the stem, § 251 p. 153): Skr. *mánas-ē* Avest. *manaŋh-ę̄*, Lat. *gener-ī*; O.C.Sl. *sloves-i* like *kamen-i* § 251 p. 154.

For Skr. infinitives like *bhiyás-ē dohás-ē* see II § 132 pp. 412 f. and III § 251 p. 153. And doubtless the following forms, with an original weak grade of the *es*-suffix, have the same formation: Skr. *jiṣé* 'for victory', Gr. *γράψαι* 'to write' (one of the forms connected with the *σ*-aorist) and Lat. *darī fer-rī*, see II § 162 p. 490, and the Author, Gr. Gr.[2] p. 116. An original weak stem is also contained in Lat. *mēns-ī* O.Ir. (dat. and loc.) *mīs*, Idg. **mē-ns-ai̯* (II § 132 p. 415).

For O.Ir. *taig* (nom. *tech teg* 'house'), see § 259 p. 159.

Pr. Idg. comparative **ōk̑is-ai̯* 'ociori' (cp. II § 135 p. 429): Skr. *áśīyas-ē* Avest. *āsyaŋh-ę̄*, Lat. *ōciōr-ī*.

Pr. Idg. part. perf. act. **u̯ei̯dus-ai̯* 'εἰδότι': Skr. *vidúṣ-ē* Avest. *vīđuš-ę̄*.

Skr. *nas-é* 'to the nose' Lat. *nār-ī*. Skr. *ās-é* 'ori' Lat. *ōr-ī*. Skr. *mūṣ-ē* (inferred from nom. pl. *mū́ṣ-as*), Lat. *mūr-ī*.

§ **255.** 10. Stems in *-ī -iu̯*, *-ū -uu̯*, and in *-ṝ -l̥̄ -n̥̄*, and Root-Nouns in *-u̯* and *-i̯*.

Pr. Idg. *-iu̯-ai̯ -uu̯-ai̯*, e. g. **bhruu̯-ai̯* from nom. **bhrū-s* 'brow'. Skr. *dhiy-ḗ* 'to or for meditation' Ved. *nadíy-ē* 'to a river'; *bhruv-ḗ*, Ved. *śvaśrúv-ē* 'socrui', Avest. *tanuyḛ̄* i. e. *-uv-ḛ̄* 'to a body'. Also, with the feminine marked by the ending, Skr. *dhiy-āí nadiy-āí bhruv-āí śvaśruv-āí*, cp. § 233 p. 123, § 280. Lat. *su-ī*, *socru-ī*, cp. § 197 p. 76; *vī* may be contracted from **viu̯-ī*. O.C.Sl. *krŭv-i* 'sanguini', *svekrŭv-i* 'socrui'.

Similarly Skr. *gir-ḗ* 'for praise' *pur-ḗ* 'to a stronghold' = **gṛr-ai̯ *pl̥l-ai̯*, and *gō-ṣaṇ-ē* (inferred from *gō-ṣaṇ-as*, from nom. *gō-ṣā́-s* 'gaining cattle') = **-sn̥n-ai̯*. Cp. § 233 p. 123.

Skr. *nāv-ḗ* 'navi', Lat. *nāv-ī*. Skr. *rāy-ḗ* from nom. *rā́-s* 'property, riches', Lat. *rēī*. Skr. *div-ḗ* (nom. *dyāú-ṣ* 'daylight'). Lat. *Jov-ī Diov-ī*. Skr. *gáv-ē* Avest. *gav-ḛ̄*, Lat. *bov-ī*; the ground-form was **guu̯-ái̯ *gu̯-ái̯*, and the barytone Skr. word is an ad-formate of *gáv-i* like the gen. *gáv-as* (§ 238 p. 130), cp. II § 160 p. 482; O.Ir. *boin* (dat. and loc.) is an ad-formate of *coin*, see § 221 p. 98.

Locative Singular.[1])

§ **256.** There are two proethnic formations.

1. In certain consonantal stems, and in *i*- and *u*-stems, the stem by itself was used for the locative. In such locatives forms

1) J. Schmidt, Der locativus singularis und die griech. *i*-Declination, Kuhn's Zeitschr. XXVII 287 ff. W. Schulze, Zum idg. Locativ singul. der consonantischen Stämme, *ibid.* pp. 546 f. Bezzenberger, Die idg. Endung des Loc. Sing. der *u*-Declination, Nachr. v. d. Gött. Ges. d. Wiss. 1885 pp. 160 ff. Bartholomae, Zur Bildung des loc. sing. der fem. *aj-* [*i*-]Stämme, Ar. Forsch. II 100 ff. G. Petroni, Dei casi nelle lingue classiche e particolarmente del locativo, Neapel 1878. Schneidewind, De casus locativi vestigiis apud Homerum et Hesiodum, Halle 1863. Ebel, Ein griech. Genetiv-Locativ, Kuhn's Zeitschr. XIII 446 ff. Höfer, Der lateinische Dativ-Locativ, in his Zeitschr. f. die Wissenschaft d. Sprache II 192 ff. C. Wagener, De locativi Latini usu, Jena 1871. Deecke, Über den lat. Lokativ, a 'Programm'-essay sent in at Mühlhausen i. E., 1890, pp. 31 ff. L. Havet, Le locatif

the formative suffix had an *e*-grade vowel; sometimes the first strong grade *-e-* (as Hom. *δό-μεν*), and sometimes the third, *-ē-* (as Cret. *δό-μην*). Forms with the third strong grade became indistinguishable from those of the nom. sing. masc. fem. and the nom. acc. sing. neuter: compare e. g. *δό-μην* with *ποι-μήν* O.C.Sl. *i-mę* (§ 223 p. 100). As a matter of fact, both these formations are doubtless the same, and the only difference is in their use in the sentence.

2. The second is a commoner formation, found in all stems. It had the case-ending *-i*, which seems to have been the same as the *-i* in the loc. pl. *-s-i* (Gr. *-σι*); see § 356. This *-i* once had a more general local meaning, as is shewn by the personal pronouns which contain it, § 447; cp. § 239 p. 132 and § 424.

-i added to *o-* and *ā*-stems contracted with their final into the diphtongs *-oi̯* *-ei̯* and *-āi̯*. Elsewhere the sound remained a vowel, forming a separate syllable; this happened in Aryan (*-i*), Greek (*-ι*), and Italic (Lat. Umbr. *-e*), now and then in Germanic (A.S. *hnyte*, § 272), and perhaps in Keltic (Gall. *-rīgi*, see § 271); in the two last branches it has left behind many traces in the numerous *umlaut* ("mutated") forms, i. e. those with modified vowels. In Baltō-Slavonic it can be seen only in the diphthongs of *o-* and *ā*-stems.

Along with *-i* we have *-ī* in Greek and Sanskrit, Hom. *πατέρ-ī* and the like (Hartel, Hom. Stud. I² 56 ff.), Ved. *vaktár-ī* and the like (Lanman, Noun Inflection 411, 426). Wackernagel, however, looks upon this as a rhythmical lengthening which dates from the parent language itself (Das Dehnungsgesetz der gr. Compp., 12 ff.).

In stems which show ablaut variation in their cases, the strong stem is found before *-i* (*-ī*) from the proethnic period onwards. Thus it is natural to suppose that *-i* was added to

ombrien, Mém. de la Soc. de lingu. II 391 sq. Smith, Litauisches: über den Singularlocativ der Pronomina und Adjectiva, Kuhn-Schleicher's Beitr. I 506 f.

forms which were used for the locative even without it; cp. e. g. Skr. *mūrdhán-i* beside (*mūrdhn-í* and) *mūrdhán*. But it must not be forgotten that this theory is not absolutely borne out by *i*- and *u*-stems. In these stems, *-eḯ-i* and *-eṷ-i* are proethnic endings; but we cannot say for certain that there were parallel endings *-eḯ* and *-eṷ*, although we do find *-ēḯ* and *-ēṷ* (§§ 260 Rem. and 261 Rem.). Nor is it clear whether such forms as Skr. *mūrdhn-í* Gr. *ἀρν-ί*, Gr. *πατρ-ί* Goth. *fadr*, Skr. *div-í* Gr. *Διϝ-ί* are older than Skr. *mūrdhán-i* Gr. *ποιμέν-ι*, Skr. *pitár-i* Gr. *πατέρ-ι*, Skr. *dyáv-i*; or whether they are really later (even then they may be proethnic), and followed other cases which had a weak grade of vowel, e. g. the dative singular. These questions I content myself with suggesting.

Remark. Bartholomae (Bezz. Beitr. XV 23) attempts to establish an Idg. locative suffix *-u* beside *-i*, e. g. in Skr. *múh-u* 'immediately'. But the forms concerned are only adverbs. Cp. § 356.

§ **257.** I. Stems without any case-suffix used as Locative Singular.

1. *n*-stems. Cp. § 186 pp. 62 f.

Forms in *-en*. Ved. *mūrdhán* (*mūrdh-án-* 'point, head'), *udán* (*ud-án-* 'water'), *kárman* (*kár-man-* 'work, action') and the like; O.Pers. *xšapa-vā* 'or at night' i. e. *xšapan-vā* (stem *xšapan-*), see Bartholomae Handb. § 35 Rem. p. 22. Gr. *αἰ(ϝ)έν* adv. 'always', from *αἰ(ϝ)ών* 'space of time, eternity'; in the same group we place the infinitives in *-μεν*, found in Homer and in many dialects of Greek, such as *δόμεν ἴδμεν ἔμμεν* (Cret. El. *ἦμεν*, N.W. Greek *εἶμεν*), which served as the model for *ὀρνύμεν, ἀγέμεν, ἀξέμεν, ἑστάμεν*. O.C.Sl. *kamen-e* (stem *kamen-* 'stone') probably has the same obscure *-e* which occurs in the Lith. loc. sing. *rañkoj-e žẽmėj-e* etc. (§§ 264, 265), cp. § 186 p. 62, § 246 p. 145 and § 409. A different explanation of *kamen-e* is offered by J. Schmidt, Kuhn's Zeitschr. XXVII 307.

Forms in *-ēn*. Avest. *cašmąn* (I § 200 p. 168) stem *cašman-* 'a look, eye'. Gr. Cret. inf. *δό-μην*.

Skr. Ved. *kṣáma* beside *kṣáman* 'on the earth' is regarded as a form in *-n̥* by Bartholomae (Bezz. Beitr. XV 39).

Lastly, we place here O.Ir. *toimte* beside *toimtin* (Zeuss-Ebel p. 266), nom. *toimtiu* 'cogitatio' (Thurneysen, Bezz. Beitr. VIII 269); *-e* stands doubtless for **-ion*, and that for **-iōn*.

§ **258.** 2. *r*-stems. Two groups of words fall in this section. (1) A few forms which stand upon the border line between an adverb unconnected with any declined noun, and the case of a noun; as Skr. *áhar-divi* 'day by day', Avest. *z^{e}mar^{e}* 'in the earth', which are naturally associated with non-nominal forms such as Skr. *antár* 'inside, inwards' (beside *antári-kṣa-*) Lat. *inter*, Gr. *ὕπερ* Lat. *s-uper*. Gr. *νύκτωρ* 'by night', perhaps containing *-r̥*, and Skr. *múhur* 'in an instant', containing *-r̥r* (cp. Bartholomae, Bezz. Beitr. XV 18, 23). (2) Secondly, certain living cases, as Skr. *mātár-i dātár-i dátar-i* Avest. *mātairi dātairi* Gr. *μητέρ-ι*, if they are really extensions of loc. **māter *dōter*; see § 256, last page. Cp. further § 186 pp. 62 f., § 224 Rem. p. 104.

§ **259.** 3. *s*-stems.

W. Schulze (Kuhn's Zeitschr. XXVII 546) cites Skr. *sa-dívas* 'at once' *pūrvē-dyúṣ* 'on the day before, early in the morning', and with the latter he connects Lat. *dius (noctū diusque)*. Another form is doubtless *śv-ás* 'to-morrow' (cp. Avest. *sū-ra-* adj. 'belonging to the morning'; Geldner, Kuhn's Zeitschr. XXVII 253, 261). Gr. Dor. *αἰές* 'always' beside acc. *αἰῶ* for **αἰϝο(σ)-α* (II § 133 p. 423). Lat. *penes* beside *penus -oris* (II § 132 p. 419). Also O.Ir. dat.-loc. sing. of neut. *es*-stems, as *taig* Mid.Ir. *tig*, from nom. *tech teg* 'house' (Thurneysen, Bezz. Beitr. VIII 269). Lastly, Slav. *sloves-e*, with affixed *-e* like *kamen-e*, see § 257 pp. 158 f.

§ **260.** 4. *i*-stems. Pr. Idg. had parallel endings, *-ēi̯* and *-ē* with *-i̯* dropped (I § 645 p. 489).

Skr. has only **-ē*. Skr. Ved. *ávā*, *agnā́* (*agní-ṣ* 'fire'); the variants *ávāu*, *agnāú*, which in the later language were used exclusively, took their *-āu* from *u*-stems, as *sūnāú* (§ 261). *pátyāu* (*páti-ṣ* 'husband') took the place of *pátāu*

owing to the influence of *pátyē pátyā* (see § 231 p. 120, § 249 p. 149), just as Goth. *kinnáu* instead of **kináu* got *-nn-* = **-nu̯-* by analogy (§ 261). Avest. *aža*, O.Pers. *ahi-fraštā* (*ahi-frašti-* 'punishment by the sword').

In Greek *-ēi̯* or *-ē* was extended by the loc. suffix *-i*, and became *-ēi̯-i* or *-ē-i*, whence Hom. *πόλῃι* Att. *πόλῃ* from the stem *πόλι-*. Cp. acc. sing. *Ζῆν-α* built up on *Ζῆν* § 221 p. 98, gen. *ἑμε-ῖο* and acc. *ἡμέ-ας* built up on **ἑμε* and **ἡμε* = Dor. *ἁμέ* §§ 443, 450. *πόλῃι* suggested *πόλῃος πόλῃες* and other cases of the same kind (cp. § 231 p. 120).

The Old Latin "dative" in *-e*, as *Salūte patre*, and the adverb *peregre* may possibly have this Idg. *-ē*; but *-e* may also be Idg. **-i*, the loc. suffix of consonant stems (cp. *rūr-e*, *Carthāgin-e*), taken over by *i*-stems. The ending *-ēi̯* may be contained in the Osc. "dative" in -eí, as Herentateí 'Veneri, Volupiae', and in the Umbr. in *-e -i*, as *Tarsinate* 'Tadinati' Marti 'Marti' (§ 249 pp. 151 f.); but -eí may be derived from *-ei̯-i* (§ 266). Lat. *ovī peregrī* too, and the like, may contain Idg. *-ēi̯*, as we saw on pp. 151 f. In the same passage it is mentioned that it is quite possible for the *-e* of Umbr. *ocre-m ocre* 'in ocre' to be the locative ending **-ē* (cp. Sab. *Flusare* 'in Florali').

O.Ir. *fāith* used as a locative (cp. neut. *muir* 'in mari') may have been either **u̯ātēi̯* or **u̯ātē* originally. Cp. § 249 pp. 151 f., and § 278. Perhaps Gall. *Ucuete* belongs to the same class (Bezz. Beitr. XI 131, 153).

Goth. *quma* 'for coming', for **kumē?* If so, the confluence of this case with the "dative" of *o*-stems (*vulfa*, see § 241 p. 137, § 246 p. 146) was merely one of form, and did not extend to use. (In § 231, page 119, we saw that the ending of the gen. sing. of masc. *i*-stems need not depend entirely upon borrowing from stems in *-o-*). However, great doubts as to the correctness of this explanation are suggested by O.H.G. *chume* beside *wolfe*.

Goth. *anstái* ('favour', dat.) may come from *-ēi̯*, and Streitberg sees the same ending in O.H.G. *ensti*; he assumes

that the first change of pr. Germ. -*ēi̯* in West-Germ. was to *-*ĕi̯* (cp. § 263 Rem. pp. 165 f.), just as he derives Goth. *sunáu* O.H.G. *suniu* from the same ground-form *-*ēu̯*. But other views of *ensti* and *suniu* are not excluded (see the Rem. below, § 261 and Rem., §§ 266, 267, 278); and in *anstái* and *sunáu* it is at least possible that *a* is due to the gen. sing. (*anstáis sunáus*) — cp. A.S. *ȝuman* as contrasted with Goth. *gumin* § 269, and the like.

Old Lithuanian had an infinitive in -*të*, which still survives in some parts: e. g. *dèk-të* trans. and intrans. 'to burn' (beside nom. *dekti-s*, seen in *ugnã-dekti-s* f. 'stinging cold', cp. II § 100 pp. 304 ff.). This doubtless comes from *-*tēi̯* : *-*ēi̯* became first *-*ei̯* (I § 615 p. 465) and then -*ë* (I § 68 p. 60). There is another series of infinitive forms ending in -*tè*, which are added to cognate verbs to express an intensive meaning, as *dektè dẽga* 'it burns up clear': -*tè* may be derived from *-*tē* according to I § 664. 3 pp. 523 f. Thus both the Idg. endings -*ēi̯* and -*ē* were kept in use together, but they were differentiated in use. With *dektè* we may possibly compare the adverbial form *szalè* 'at the side' (beside nom. *szalì-s* 'side'). As to Lith. *naktyjè*, see § 264. Slav. -*i* in the loc. of *i*-stems, as O.C.Sl. *nošti*, *žiti* (*žitĭ* 'life'), and in the infinitive, as *ži-ti* 'to live' (Lith. *gý-të gý-ti* 'to revive, become well') may be derived either from *-*ēi̯* (*-*ēi̯*, *-*ei̯*, *-*i*, I § 68 p. 60) or from *-*ē* (I § 76 p. 66).

Remark. We have already several times assumed a change of -*ēi̯* (before consonants) to -*ei̯* in the European languages, in Osc. Herentateí Umbr. *Tarsinate* Lat. *peregrī*, Lith. *dèktë* O.C.Sl. *nošti*, and cp. Streitberg's explanation of O.H.G. *ensti*. Now since in *men*-stems, -*mēn* and -*men* are both proethnic locative endings, it is at least a fair question to ask whether -*ei̯* was not really -*ĕi̯*, and not -*ēi̯*, in Indo-Germanic. Bartholomae would regard Avestic infin. like *mrūitē* as forms of this kind with -*ei̯*, see § 249 p. 150. The same question must be asked with regard to *u*-stems (§ 261 Rem.). Cp. § 256 p. 158.

§ **261.** 5. *u*-stems. Pr. Idg. -*ēu̯*, **sūnēu̯* 'in filio'.

Skr. *sūnāú*. Avest. *bāzāu* (O.Pers. *bābirauv* stem *bābiru-* 'Babylon', cp. the Remark, below). It may be conjectured

that this ending *-āu* served as a foundation for the Iranian nom. sing. in *-āu-š*, acc. sing. in *-āv-am*, gen. sing. in *-āu-š*, nom. acc. pl. in *-āv-as*, as Avest. *bāzāu-š* O.Pers. *dahyāu-š* etc. (§ 196 p. 76, § 215 p. 92, § 232 p. 122, § 318).

Greek. Perhaps we should place here the locative of nouns in *-εύς*, as *ἱππεύς χαλκεύς*, whose connexion with Skr. adjectives such as *aśvayú-ṣ* 'desiring horses' *dēvayú-ṣ* 'reverencing the gods' Wackernagel tries to make probable, without having fully mastered the phonetic difficulties (see II § 105 p. 319 and the Author's Gr. Gr.[2] p. 100). Supposing the existence of pr. Gr. **hippe(i̯)ēu̯* = Skr. *aśvayāú*, it might have been extended to **hippe(i̯)ēu̯-i*, as in *πόλει* Idg. **-ēi̯* or **-ē* was extended by *-i*, whence arose *-ē-i* in the Greek form (§ 260 p. 160). And as *πόλει* gave rise to the forms *πόληος πόληες* etc., so **ἱππεηϝ-ι* gave rise to **ἱππεηϝ-ος *ἱππεηϝ-ες* etc. (cp. above Avest. *bāzāu-š* etc. following the loc. *bāzāu*). *-εη-* was everywhere contracted into *-η-*, whence *ἱππῆϝ-ι ἱππῆϝ-ος* etc.[1]) Why this re-formation was confined to nouns in *-εύς* and did not affect stems like *πῆχυ-ς* and *ἡδύ-ς*, I must admit that I do not know. But the corresponding re-formation in *i*-stems did not affect all words any more than this did. *πόλι-ς* is the only word in which it appears; but the reason for the limitation is quite obscure. As to the re-formed nom. sing. *γραφής* and its like, see Meister, Gr. Dial. II 110, 272, Zum el., arkad., und kypr. Dial. 40 f.; Johansson, Bezz. Beitr. XV 178.

Lat. adv. *noctū* (cp. Skr. *aktāú* 'by night') and Umbr. manuv-e 'in manu' must be placed here; so must doubtless the forms, used as datives, Lat. *manū ūsū* Umbr. *trifo* 'tribui'. **-ēu̯* in pr. Italic became **-eu̯* before consonants, and this became *-ou̯* (I § 65 p. 52, § 612 p. 462). On *manū ūsū* § 279 may also be compared.

Gall. *Ταρανοον (Taranou)* from *Taranu-* 'god of thunder'

1) The adjectives in *-η(ϝ)-ιο-ς* may have been formed directly from the old locative, e. g. *-ειο-ς* for **-ei̯-i̯o-s* and the like (II § 63 Rem. 2 p. 128; Johansson, Bezz. Beitr. XV 179).

(cp. *Taranu-cno-*), where too *-oṷ* comes from **-eṷ*, **-ēṷ* (I § 66 p. 56). The same ground-form may be assumed for O.Ir. *biuth.*

Goth. *sunáu* may come from *-ēṷ*, and according to Streitberg so may O.H.G. *suniu sitiu*, Norse Run. *Kunimu(n)diu* O.Icel. *syni* 'to a son'. But there are other possibilities; see § 260 p. 161.

O.C.Sl. *synu* for **-ēṷ* through the intermediate stages **-eṷ -oṷ* (I § 68 p. 59, § 615 p. 465). For Lith. *sūnūjè* see § 264.

It may be that this same case-ending lurks in many adverbial forms: e. g. in Gr. *ἄνευ* 'without' O.C.Sl. *vŭnu* 'forth, out' (both of these have *-eṷ*, the form assumed by *-ēṷ* before consonants) beside Goth. *inu* O.H.G. *āno* 'without' (cp. the Author, Gr. Gr.[2] p. 218). Bartholomae (Bezz. Beitr. XV 16) connects *ἄνευ* with Skr. *sanu-tár*, but he too regards it as the loc. of a *u*-stem.

Remark. In the European languages, we have often assumed a change of *-ēṷ* (before consonants) to *-eṷ*, as in Lat. *noctū* Umbr. manu-ve, Gall. *Ταρανοου*, O.H.G. *suniu* O.Icel. *syni*, O.C.Sl. *synu* (Gr. *ἄνευ*). Here, as with *i*-stems (§ 260, Rem.) the question arises whether there was not a proethnic ending *-eṷ* with short *-e*. Bartholomae, *loc. cit.*, cites, in support of this, Avest. *per^{e}tō* O.Pers. *babirauv* (Skr. Ved, *sā́nō* proves nothing), to which we add Avest. *aṇhav-a gātav-a* (Caland. Kuhn's Ztschr. XXX 539 f.; Jackson, Am. Or. Soc. Proceed., 1889, p. cxxv).

§ 262. 6. All remaining stems.

Avest. *dąm* from the stem *dam-* 'house', Idg. **dḗm.* According to a conjecture of Bartholomae's in Kuhn's Ztschr. XXIX 497 f., there is a similar locative formation contained in the adverbs Skr. *kam* Avest. *kąm*, whose ground-meaning he would have to be 'at pleasure, for one's pleasure' (cp. Skr. *kā́m-a-s* 'desire').

Skr. *parut* adv. 'last year' beside Gr. *πέρυσι* O.Icel. *fjǫrð fjorð* adv. 'last year' O.Ir. *onn-urid* 'ab anno priore'. Is *parut* due to a confusion of **per-uti* and **per-ṷet*? In II § 4 p. 9 we connected the word with Gr. *ϝέτος*; but it must be admitted

that this hypothesis is not quite free from doubt. Cp. Feist, Grundriss der got. Etym., pp. 30 f.

ī- iu̯- and *ū- uu̯-*stems, in addition to *-iu̯-i* and *-uu̯-i* (§ 268), have *-ī* and *-ū*: Skr. Ved. *gāurī́*, from *gāurī́-ṣ* 'the cow of the species *Bos Gaurus*', *camū́* from *camū́-ṣ* 'dish, platter'. It is very unsafe to assume this formation for Greek and Latin merely on the strength of Gr. Aeol. Dor. Ion. *πόλῑ* and Lat. *vī*; for *πόλῑ* need not come from *πόλῑ-ς*, but may come from *πόλῐ-ς* (§ 249 p. 150), and *vī* may be explained as being for **viu̯-i* (§ 268). Nor need we postulate **svekry* to explain the existence of *svekrŭv-e*; see § 268.

Remark. Bartholomae (Kuhn's Ztschr. XXIX 583) conjectures that *gāurī́ camū́* were coined beside the loc. pl. *gāurī́-ṣu camū́-ṣu* the relation between them being suggested by *vŕ̥kē* : *vŕ̥kē-ṣu*.

In Irish, locatives without *-i* might be looked for in *cathir* beside *cathraig* (nom. *cathir* 'town'), *bethu* beside *bethaid* (*bethu* 'life'), and similar words; cp. *toimte* § 257 p. 159, *taig* § 259 p. 159, *biuth* § 261 p. 160. However, many of these short "datives" were doubtless first made from words whose nom. and dat. had run together, such as *athir* 'father'. Datives like *toimtiu* (beside *toimte toimtin*, see Zeuss-Ebel p. 266) give special support to this theory, because they can be explained on no other.

§ **263.** II. Locative Forms with the suffix *-i*.

1. *o*-stems. Pr. Idg. **u̯l̥qo-i̯* 'in lupo', and also *-é-i̯*, as **jugé-i̯*, cp. § 240 p. 133. Perhaps this formation served for the genitive too even in Idg., see § 239 p. 132.

Skr. *vŕ̥kē*. Avest. *vehrkē*, O.Pers. *pārsaiy* (*pārsa-* 'Persian, Persia'); with the postposition *ā* (or its unaccented by-form *a*, see § 246 p. 145) Avest. *zastay-a* 'in manu' (cp. § 308 for O.Pers. *dastay-ā*).

Gr. Att. *οἴκοι* 'at home', *Ἰσθμοῖ*. Since in Attic the only remaining examples of forms in *-οι* are adverbs (compare the pronominal adverbs *ποῖ*, *οἷ* and so forth), similar adverbs were made from other stems, as *Κιχυνν-οῖ* from *ἡ Κίκυννα*. But in Boeot., Arcad.-Cypr., Elean, and N.W. Greek, *-οι* did not

cease to be a living case-ending, and it became completely confused with the dative in orig. -*ōi̯* (§ 247 pp. 147 f.). In Thessalian the loc. in -*οι* was used for the genitive as well (see § 239 p. 131), for which the use of *μοὶ οἱ* instead of a possessive genitive is primarily responsible (§ 447). The ending -*ει* is never a case-ending in any Greek dialect, but it is only found in adverbs; as Att. *οἴκει*, *αἰεί ἀεί* (with instr. *αἰῆ*, § 275) beside Lat. *aevo-m*, *ἀμαχεί* beside *ἄμαχο-ς*, Cret. *διπλεῖ* etc., cp. the pronouns Dor. *πεῖ ὁπεῖ* and others.

In Italic, -*ei̯* is clear in Osc. múíníkeí tereí 'in communi terra' *comenei* 'in comitio'. Latin has the locative only in adverbs, which had doubtless orig. -*ei̯*, e. g. *bellī*, *domī*, spelt sometimes with -*ei* in early Latin; the explanation of -*e*, as in *die quinte*, is doubtful. As regards Umbr. uze onse 'in umero', cp. § 246 p. 146. Falisc. *Zextoi* 'Sexti' is a very dubious relic of Idg. -*oi̯*, see § 239 Rem. pp. 132 f.

O.Ir. *cinn* 'at the end, after' (nom. *cenn* 'point, head, end') for **kuennei̯* or **kuennoi̯* (Gall. *Penno-*).

Germanic. -*ei̯*, pr. Germ. -*ii̯* -*ī* (I § 67. 2 pp. 57 f.), is seen in A.S. *dæʒi* (*dæʒ* 'day'), and, with -*i* dropped, *hām* (*hām* 'home'), and in O.Swed. *dæghi* O.Icel. *dege* (cp. the pronouns *þī*, *hvī*), and doubtless, as Kögel says, in O.H.G. adverbs like *nidari*, *heimi* beside *nidare*, *heime* (Kögel, Ztschr. für deutsch. Alt., 1884, pp. 118 f.). -*oi̯* is seen in O.H.G. *tage*, *wolfe* A.S. *dæʒe*, O.Icel. *ulfe*, *ulfi*, and doubtless Goth. *daga vulfa* (cp. Rem.); though *ulfe*, *vulfa* may be dative in -*ē(i̯)* (§ 246 p. 146), ablative in -*ēd* (§ 241 p. 135), or instr. in -*ē* (§ 275), and the West-Germ. and O.Icel. forms may also be the dative in -*ōi̯* (§ 246 p. 146).

Remark. It has been proposed to derive Goth. *daga* from **dagai̯*. Hitherto, in view of Goth. *gibái* (I § 659. 3 p. 512), I have felt disinclined to believe that in words of more than one syllable -*ai̯* became -*a* in pro-ethnic Gothic — a theory, by the way, which is by no means adequately supported even by the distinction between -*ai̯* with the acute and with the circumflex (Hanssen, Kuhn's Ztschr. XXVII 612 ff.; Sievers, Paul's Grundr. I 403). But Streitberg (Germ. Comp. auf -*ōz-*, pp. 22 ff.) has made it probable

that the shortening of the long vowels in pr. Germ. *-ēi̯ -ēu̯ -ōi̯ -ōu̯* took place not in pr. Germ., but only in the separate dialects of Germanic. If this be so, the theory in question is not barred by *gibái* for pr. Germ. *-ōi̯*. It must be admitted that Streitberg's view is not certain; for O.H.G. *ensti suniu* O.Icel. *fundi syni* may contain Idg. *-ei̯ -eu̯* (not *-ēi̯ -ēu̯*), see § 260 Rem., § 261 Rem. It is quite possible to explain Goth. *baírái* (3rd. sing. opt.) as re-formation of **baíra* following the other persons.

Lith. *-ë*, now only adverbial, *namẽ* 'at home'; more widely used in O.Lith., as *dëvë-p* 'with God' (spelt *diewiep*). If O.Lith. spellings like *dieweie paneie* (Bezzenberger, Zur Gesch. der lit. Spr., 133) are meant to express the sounds *-eje*, and not *-ėje*, they must contain the ending *-ei̯*, to which has been affixed the same *-e* as *rañkoj-e* has (§ 264). *-ë* may be the same as the first part of *-ej-e* (see I § 68 pp. 59 f.); but it may represent Idg. *-oi̯* (I § 84 p. 81). How to dispose of the ordinary ending in modern literary Lithuanian, *-e* (as *vilkè*), is a doubtful question. Leskien (Decl. p. 47) and Brückner (Arch. für slav. Phil. III 277) conjecture that earlier *-ë* was changed to *-e* on the analogy of *-je*, which I cannot agree with. We shall return to *vilkè* in § 424. At present all *i̯o*-stems have *-yje*, the same ending as those in *-i-* (§ 264); thus we have not only *žõdyje*, *gaidyjè* from the nom. *žõdi-s* 'word', *gaidỹ-s* 'cock', but also *svetyjè* from nom. *svẽczia-s*. In forms of the same kind as this last, *-yje* is comparatively late; in O.Lith. *krauieie* and *krauie* are the forms which come from *krauja-s* 'blood', and so forth. We have already offered a conjecture (§ 239 p. 132) that *žõdyje* is the transformation of an original locative in *-ī* (cp. Lat. *fīlī* used as gen. sing.).

O.C.Sl. *vlŭcě* for **u̯lq̥oi̯*. But it is not clear why the ending is *-ě*, and not *-i* as it is in the nom. pl. *vlŭci* = Gr. λύκοι. Little is gained by assuming that *vlŭcě* is an ad-formate of the fem. *rącě* (§ 247 p. 147, § 264). Compare I § 84 pp. 81 f., and to the authorities cited in Rem. 3 add Jagić, Arch. für slav. Phil. X 191.

264. 2. *ā*-stems. Even in proethnic Idg., locative and dative had become the same in form (§ 247 pp. 146 f.). Pr. Idg. **eḱu̯āi̯*. Skr. *áśvāy-ām* O.Pers. *arbirāy-ā*, stem

arbirā- 'Arbela'. Gr. Ion. *Θηβαι-γενής* 'born in Thebes' El. *'Ολυμπίαι* 'in Olympia'. Lat. *Rōmae*, on early inscr. *Romai*; Umbr. sate *sahate* 'in sancta', Osc. víaí 'in via', cp. § 247 p. 148. O.Ir. *mnāi*, *tuaith*, see § 247 p. 147. Goth. *gibái* A.S. *ʒiefe* (cp. § 263). Lith. *rañkoj-e*, O.C.Sl. *rącě*.

Proethnic Aryan had **-āi̯-ā* with the postposition *ā*. This ending remained in O.Pers., whilst in Sanskrit a further affix **em* was added to it (see § 186 p. 62), as in *bṛhatyā́m* (§ 265). In Avestic the *ā* of the penultimate was shortened after the analogy of the instrumental ending *-aya*, whence *haęnaya* (cp. § 229 p. 115). The fusion of the particle *ā* with this case in pr. Aryan distinguished it from the dative in *-āi̯*; and we may follow Streitberg in assuming that in the same period the resemblance between **aśu̯āi̯ā* and **bhṛĝhn̥t(i)i̯ā* (Avest. *ber^ezantya* O.Pers. *harauvatiyā*, Skr. *bṛhatyā́m*) caused *ā*-stems to acquire the endings gen. *-āi̯ās* dat. *-āi̯āi̯*; see § 229 p. 115, § 247 p. 147.

In proethnic Greek *-āi̯* became *-ai̯* before consonants (*Θηβᾰι-γενής*, *χῶρᾰι τινός*), but remained unchanged before sonants and at the end of a sentence. For further details see § 247 pp. 147 f.

In Umbr. *totem-e* 'in civitate' (beside *tote*), L. Havet equates *-em* with the Skr. ending *-āyām* (Mém. de la soc. de ling., II 391 foll.). But Bücheler Umbr. p. 185 has a more satisfactory explanation of it. He holds that *totem* = *tote* + *en* 'in' (I § 209 p. 177); and to this he says *-e(n)* was added again, by assimilation to words in which *-e(n)* remained a distinct syllable, e. g. manuv-e 'in manu'. Cp. Prākrit *tumaṃ* instead of *tuṃ* 'thou' (Skr. *tvám*) following *aham* 'I'; Lith. dial. *jū̃ke-sis* 'they mock', because *-si* and *-s* are both used for this part of the verb (thus it is a contamination of *jū̃kesi* and *jū̃kes*); Skr. Ved. 3rd. pl. mid. *duduhrirḗ* instead of *duduhrḗ* after the analogy of *jagmirḗ*; and other instances of the same kind which I have collected elsewhere (Morph. Unt. III 67 ff.).

Lith. *rañkoj-e* like *žẽmėj-e* (§ 265) and perhaps *dëvej-e*

(§ 263 p. 166) with the same particle of uncertain origin which is in the loc. pl. *rañkos-e* (§ 356) and in the O.C.Sl. loc. sing. *kamen-e*, possibly the *-a* of Skr. dat. *vṛkāy-a* (§ 186 p. 62, § 246 p. 145, § 257 p. 158, § 409). *rañkoje žẽmėje* were incorrectly analysed, and the ending was imagined to be *-je*; hence such re-formations as *naktyjè* (*naktì-s* 'night') and *sūnŭjè* (*sūnù-s* 'son'). These forms lost their *-e* before vowels in prehistoric times, and thus arose *rañkoj rañko*, *žẽmė*, *naktỹ*, *sūnuĩ*.

§ **265.** 3. *ī- i̯ē*-stems (cp. p. 68 footnote 1). Locative and dative had become identical in form in proethnic Indo-Germanic (§ 248 pp. 148 f.). Pr. Idg. **bhṛĝhn̥t(i)i̯ēi̯* and *-(i)i̯ē* 'in celsa'. Avest. *barentya*, O.Pers. *harauvatiyā* 'in Arachosia' (as to the nom. *harauvatiš* see § 191 p. 68); Skr. *bṛhatyā́m* with the particle **-em* (cp. *áśvāyām* § 264 pp. 166 f., O.C.Sl. instr. *tojǫ* § 276), so also we have Avest. *-yąm* beside *-ya* (Bartholomae, Ar. Forsch. II 104). Lat. *faciē*, cp. § 248 pp. 148 f. Mid.Ir. *Brigti insi*; *-i* for **-iī*, and this for **-(i)i̯ēi̯* or **-(i)i̯ē*, cp. *loc. cit.* Lith. *žẽmėj-e žẽmė*, cp. § 264; O.C.Sl. *zemlji*, cp. § 248 p. 149.

In proethnic Aryan the dat.-loc. forms **-i̯āi̯* and **-i̯ā* were differentiated in use: **-i̯āi̯* was appropriated to the dative, **-i̯ā* to the locative. The loc. use of **-i̯ā* was natural, because *-ā* was the loc. ending of *i*-stems (§ 260 pp. 161 f.), and other loc. forms had the postposition *ā* tacked on to them; while *-āi̯* recalled the dative ending of *ā*- and *o*-stems (§ 246 p. 145, § 247 pp. 146 f.).

Lith. *vẽžanczioj-e* follows the *i̯a*-stems; so probably Goth. *frijōndjai* (cp. § 248 p. 149).

§ **266.** 4. *i*-stems. *-ei̯-i* beside *-ē(i̯)* (§ 260 pp. 161 ff.), cp. dat. *-ei̯-ai̯* § 249 p. 149.

In the Veda, a few forms in *-ayi*, on the analogy of *sūnávi*, have been restored by conjecture in place of the *-āu* of the texts, which violates the metre: e. g. *ājáyi* (*ājí-š* 'contest'). See Lanman, Noun Inflexion pp. 387 f. As regards the fem. *ávyām*, see § 231 p. 120, § 278 pp. 181 f.

Greek Hom. πόσεϊ πτόλεϊ, Att. πόσει πόλει; it must not be forgotten that (1) Att. η and ει expressed the same sound by the beginning of the fourth century B. C. (the Author, Gr. Gr.[2] p. 36), and so (2) we cannot tell whether -ει was not meant to express the old formation in -ηι -η (§ 260 p. 159). Ion. Dor. Lesb. Boeot -ī, as βάσī, can hardly be contracted from -ι (cp. κιί), but contain the Idg. ending -ī, see § 249 pp. 149 f., § 278. Cypr. πτόλιϝι doubtless follows βασιλῆϝι, as gen. Τιμοχάριϝος follows βασιλῆϝος; cp. Stolz, Ztschr. für öst. Gymn. 1889, p. 748; Meister, Zum el. ark. und kypr. Dial., 37.

-eu̯-i is perhaps contained in Osc. Herentateí Lat. *ovī*, see § 249 p. 150, § 260 p. 160.

O.H.G. *ensti* A.S. *ēste* may be derived from pr. Germ. **ansteu̯-i -iu̯-i* (I § 67. 2 pp. 57 f.), as O.H.G. *suniu* from **suneu̯-i* (§ 267). Other possibilities are suggested in § 260 p. 161, § 278.

For Lith. *naktyjè naktỹ*, see § 264 p. 168.

§ **267.** 5. *u*-stems. *-eu̯-i* beside *-ēu̯* (§ 261 pp. 161 ff.), cp. dat. *-eu̯-ai̯* § 250 p. 152.

Ved. *-av-i*, *sūnáv-i*, rarer than *-āu*. For the fem. *dhēnvā́m* see § 232 p. 122, § 279.

Gr. Hom. ἡδέι ἄστεϊ Att. ἡδεῖ ἄστει πήχει. A non-original re-formation in *-u̯-i* is Ion. δουρί Att. δορί (δόρυ n. 'wood, shaft, spear') for **δορϝ-ι* (I § 166 pp. 146 f.), following the analogy of the gen. δουρός δορός for **δορϝ-ος* (see § 232 *b* p. 122). Cp. Germ. **manu̯-i* below.

O.H.G. *suniu sitiu* Norse Run. *Kunimu(n)diu* O.Icel. *syni* may belong to the same group (pr. Germ. **-eu̯-i *-iu̯-i*, see I § 67. 3 p. 57); another possible explanation is given in § 260 p. 161. A non-original formation in *-u̯-i* is Goth. *mann* O.H.G. *man* A.S. *men(n)* for **manni* earlier **manu̯-i*, which follows the analogy of the gen. Goth. *mans* etc. for **manu̯-iz* or **manu̯-az* (see § 232 *b* p. 122). Cp. above, Gr. δουρί δορί.

For Lith. *sūnŭjè sunuĩ* see § 264 p. 168. — Did the *ů* of dialectic forms in *-ůje -ů*, as *danguoje Wilnuo*, come from the loc. pl. in *-ůse* (§ 357)? Other suggestions are offered

by Bezzenberger, Nachr. von der Ges. der Wiss. zu Gött., 1885, pp. 161 f., and lately by Wiedemann on p. 35 of his Litauisches Praeteritum.

§ **268.** 6. *ī- i̯i̯-* and *ū- u̯u̯-*stems; stems in *-r̥̄, -l̥̄, -n̥̄.* The ending is *-i̯i̯-i -u̯u̯-i* (beside *-ī -ū*, see § 262 p. 164). Skr. *dhiy-í bhruv-í*, Ved. *śvaśrúv-i.* Also, with the fem. endings, *dhiyā́m bhruvā́m śvaśruvā́m*, see § 233 p. 123, § 280. Gr. *κιί νί ὀφρύι νέκυι* (nom. *νέκῡ-ς*). Lat. *su-e*, and perhaps *vī* for **vi̯i̯-i* (§ 262 p. 164). O.C.Sl. *svekrŭv-e* may have once been **svekrŭv-ĭ*, and *-ĭ* have given place to *-e* (cp. *kamen-e* etc., § 257 p. 158). The forms *svekrŭv-i krŭv-i* follow the analogy of *i*-stems, § 260 p. 161.

Similarly, Skr. *gir-í pur-í gō-ṣaṇ-i*; see § 255 p. 156.

§ **269.** 7. *n*-stems. Pr. Idg. *-en-i -n-i* beside *-en -ēn* (§ 257 p. 158). Cp. § 256 pp. 156 ff.

Skr. *mūrdhán-i mūrdhn-í, áśman-i*; the forms with a weak stem are very rare in Vedic (see Lanman, Noun Infl. 535). Avest. Gāthic *cašmainī* from stem *cašman-* 'eye'; *asn-i* from *azan-* 'day' like Skr. *áhn-i.*

Gr. *ποιμέν-ι, ἀρν-ί κυν-ί* (Skr. *śún-i*); and with other strong grade forms by analogy, *τέκτον-ι, πευθῆν-ι, ἀγῶν-ι.*

Lat. *homin-e Carthāgin-e, carn-e*; with other strong grade forms substituted, *edōn-e mentiōne.* Umbr. menzn-e 'mense', cp. nom. acc. neut. sakre 'sacre' for **sakri.* In Lat. and Umbr., locative and instrumental forms had become identical, see § 274.

In Irish there was bound to be a confluence of loc. and dat., as *coin* (Gr. *κυν-ί*), *ārain*, see § 251 p. 154.

Goth. *gumin aúhsin* (Skr. *ukṣáṇ-i*), O.H.G. *gomen gomin.* In Anglo-Saxon and Norse, this case has taken *-an-* = Idg. *-on-* from the other cases: A.S. *ȝuman*, Norse Run. *-halaiban* 'socio' O.Icel. *guma*; along with this, there are traces in Norse of *-in-* = Idg. *-en-*; see Noreen, Paul's Grundr. I 494. Goth. *gōdein* (nom. *gōdei* 'kindness'), cp. Gr. *ὠδῖν-ι.* Goth. *tuggōn raþjōn* like Gr. *ἀγῶν-ι* Lat. *ratiōn-e.*

Lith. *szun-yjè akmen-yjè* follow the analogy of *i*-stems (§ 266 p. 169).

§ **270.** 8. *r*-stems. Pr. Idg. *-er-i -r-i*, cp. § 256 pp. 157 f., § 258 p. 159.

Skr. *mātár-i* Avest. *mātairi*, Skr. *nár-i* Avest. *nairi* = Gr. *ἀνέρ-ι*, Skr. *dātár-i dátar-i* Avest. *dātair-i*.

Gr. Hom. *μητέρ-ι ἀνέρ-ι* Hom. Att. *μητρ-ί ἀνδρ-ί*. *δώτορ-ι* follows *δώτορ-α* etc., *δοτῆρ-ι* follows *δοτήρ*. *φράτερ-ι* belonged originally to the same set of forms as *φράτορα*, as Skr. *dátar-i* belongs to *dátār-am*. Cp. II § 120 p. 379.

Lat. *mātr-e*; *datōr-e* with *-ōr-* following the nom. sing.

O.Ir. *māthir* for **māter-i* or **mātr-i*, which is dative too; see § 252 p. 154.

Goth. *fadr* = Gr. *πατρί*. O.Icel. *mōdr* A.S. *mēder* O.H.G. *muoter* = Gr. *μητρί*.

Lith. *moter-yjè* and O.C.Sl. *mater-i* are modelled upon the *i*-stems (§ 260 p. 161, § 266 p. 169).

§ **271.** 9. Stems ending in an Explosive. How far there was originally a strong stem in these, analogous to the endings *-en-i -er-i*, is not clear. In another place we have conjecturally restored such forms as **dént-i* 'in dente' **u̯éq-i* 'in voce' (II pp. 395, 480), cp. § 262 pp. 163 f., on Skr. *par-ut*.

Skr. *bṛhat-í*; Avest. *astvaiti astvainti* from *ast-vant-* 'having bones'. Gr. *ἰδόντ-ι φέροντ-ι*, in which the original form of the stem has been changed. Lat. *rudent-e ferent-e prae-sent-e*, where it is doubtful how far *-ent-* is derived directly from *-n̥t-* (II § 125 pp. 395 f., and footnote 1 on p. 105 of this volume). O.Ir. *carit*, also dative, see § 253 p. 155. Goth. *frijōnd* O.H.G. *friunt*; A.S. *tēð* (= Gr. *ὀδόντ-ι*) with the *i*-mutation, nom. *tōð*.

Skr. *sarvátāt-i* 'in completeness', Gr. *ὁλότητ-ι*. Lat. *novitāt-e juventūt-e*. O.Ir. *bethid* from nom. *beothu* 'life', also dative, see § 253 p. 155. Goth. *mēnōþ* A.S. *mōnað* beside nom. Goth. *mēnōþ-s* 'month' (cp. Kluge, Paul's Grundr. I 360); Goth. O.H.G. *naht* beside nom. Goth. *naht-s* 'night'.

Skr. *śarád-i* 'in autumn'. Gr. *φυγάδ-ι*. Lat. *lapid-e*. O.Ir. *druid*, also dative, see § 253 p. 155. Skr. *pad-í* O.Pers. *nipadīy* i. e. *nipad-i* 'on the foot, at once', Gr. *ποδ-ί*, Lat. *ped-e*, A.S. *fēt* for **fōt-i*. A.S. *hnyte* for **hnut-i* (nom. *hnut-u* 'nut'), in which the locative ending has not ceased to be a separate syllable, because the stem-syllable is short (I § 661. 2 pp. 517 f.).

Skr. *uśíj-i*, stem *uśíj-* 'desiring'. Gr. *μείραχ-ι*, *ὄρτυχ-ι* *ὄρτυγ-ι*. Lat. *bibāc-e*. Skr. *vāc-í* Gr. *ὀπ-ί* Lat. *vōc-e*, see II § 160 p. 480. Skr. *-rāj-i*, Lat. *rēg-e*, Goth. *reik*. O.H.G. *buoh* A.S. *bēc* (with *i*-mutation) 'libro'. O.Ir. *nathraig* (nom. *nathir* 'water-snake'), *rīg* 'regi' are also dative; but we cannot say that Gall. *-rigi*, in proper names, contains a loc. in *-i*, because for all we know the dative ending *-ai* may have become *-i̯* (*-ī*) in some Gallic dialects (cp. *Βηλησαμι* § 247 p. 147).

Skr. *ap-í* Avest. *aipya* i. e. *aipi* + the postposition *ā*, stem *ap-* 'water'. Gr. *κλωπ-ί*. Lat. *dap-e*.

§ **272.** 10. Stems in *-s*.

a. Pr. Idg. **menes-i* 'in mente'. Skr. *mánas-i dur-manas-i*, Avest. *manah-i duš-manah-i*. Gr. Ion. *μένεϊ δυσ-μενέϊ* Att. *μένει δυσ-μενεῖ* (cp. the Author, Gr. Gr.[2] § 17 pp. 36 f.). Lat. *gener-e dē-gener-e*, *rūr-e*; infinitives like *vīver-e* (cp. Skr. dat. *jīvás-ē*), see II § 132 p. 418; *tempor-e* with *-o-* from the nom. acc. sing. neut., see II § 132 pp. 418 f. Perhaps the A.S. dat. loc. *siȝor* from nom. *siȝor*, beside Northumbr. *eher* from nom. *eher* 'ear of corn', is of the same kind as Lat. *tempor-e* (cp. Kluge, Paul's Grundr. I 360. 4).

With a weak grade of the *es*-suffix, **mē-ns-i* : Gr. Att. *μηνί* Lat. *mēns-e* O.Ir. *mīs*, cp. II § 132 p. 415.

In Attic, beside *Σωκράτει* there are found a few examples of *-κράτῃ* following the model of *ā*-stems (cp. acc. *-κράτην* gen. *-κράτου*, § 220 p. 97, § 237 p. 128). It must of course be remembered that there was a confluence of *ῃ* and *ει* in Attic as early as the 4th century B. C. (see the Author's

Gr. Gr.[2] p. 36). This fact may have done a great deal to help the constant spread of the forms *-κράτην -κράτου* (Meisterhans, Gr. der att. Inschr.[2] pp. 105 ff.). Lesb. *Θεογένῃ* too follows the *ā*-stems, see § 237 p. 129.

b. Pr. Idg. comparative **ōk̂(i)i̯es-i* 'in ociore': Skr. *áśīyas-i*, Lat. *ōciōr-e* (*-iōs-* from the nom. sing.). In Greek, with the suffix *-i̯en-*, *ἡδίον-ι*.

Pr. Idg. part. perf. act. **u̯ei̯d-u̯es-i* (stem **u̯ei̯d-u̯es-* 'knowing'). Skr. *vidúš-i*. In Greek, with the suffix *-u̯et-*, *εἰδότ-ι*.

c. Root Nouns. Skr. *ās-í* Lat. *ōr-e*. Skr. *mūš-i* (inferred from nom. pl. *mū́š-as*), Gr. *μυῖ* instead of **μῡ-ί*, which would have been the regular form (see II § 160 p. 485), Lat. *mūr-e*, A.S. *mȳs*.

§ **273.** 11. Certain Root Nouns.

Skr. *nāv-í*, Gr. *νηῖ*, Lat. *nāv-e*. **d(i)i̯éu̯-i* **diu̯-í* 'in daylight': Skr. *dyáv-i* Lat. *Jov-e*, Skr. *div-í*, Gr. *Διϝ-ί Διί*, cp. II § 160 p. 481. **géu̯-i* 'in bove': Skr. *gáv-i* Lat. *bov-e*; — Gr. *βο-ϊ* O.Ir. *boin* are re-formates (§ 255 p. 156). Skr. *kšám-i* 'in terra', Idg. **ĝzhém-i*, see II § 160 pp. 482 f. Avest. *bar^{e}z-i ber^{e}z-i* 'in alto' (not actually found, but inferred from cases of the word which are), O.Ir. *brig*, Goth. *baúrg* O.H.G. *burg*, see II § 160 p. 479.

Instrumental Singular.[1])

§ **274.** There are two distinct methods of forming the Instrumental.

1. All noun-stems from the proethnic period onwards have had a suffix, whose original form may have been *-a* or *-e*, but which, is a vexed question. In considering what form to

1) Schleicher, Die beiden Instrumentale des Indogermanischen, Kuhn-Schleicher's Beitr. II 454 ff. (= Compendium[4] pp. 560 ff.). Moller, Über den Instr. im Heliand und das homer. Suffix *-φι*, Danzig 1874. Lissner, Zur Erklärung des Gebrauches des Casussuffixes *φιν φι* bei Homer, Olmütz 1865. J. Grimm, Der deutsche Instrumentalis, Germania III 151 ff.

restore as original, the following have to be taken into account: Skr. gerund *prati-bhídy-a* 'with splitting' (§ 278), Gr. *πεδ-ὰ παρ-ὰ ἅμ-α* and the like (§ 280), Lat. *ped-e* Umbr. pure 'igne' (Iguvine Tables, I. *b*. 20). In the present state of the question I consider *-a* the more likely of the two.

Remark. *-a* is supported by Osthoff, Zur Gesch. des Perf., 574 ff.; *-e* by J. Schmidt, Kuhn's Ztschr. XXVII 292 f., Pluralb. 41 f. Schmidt thinks that he has proved that the Idg. form of the suffix was *-e* and not *-a*; but here he makes a mistake. He says that the Idg. feminine formative suffix *-ā-* arose by contraction of the ending of *o*-stems with a certain *a* which forms feminine stems. He infers that *-ē -ō*, the instr. ending of *o*-stems, cannot contain a case suffix *-a*. But this supposed feminine *a* is an entirely imaginary quantity. And even supposing that *-ια* in *πότν-ια* is the same as the sound-group from which comes *-ī* in Skr. *pátn-ī*, which I deny (see § 191 p. 68, and Morph. Unt. V 29), even then, before refusing to admit an instr. suffix *-a*, a scholar would have to prove that the *α* of *-ια* represents Idg. *a* and not *ə*. By far the simplest explanation of the above named Greek adverbs *πεδ-ὰ παρ-ὰ μετ-ὰ* is to suppose them to be instrumental (*πεδὰ* = Mid.H.G. *bet-* according to Bugge, Paul-Braune's Beitr. XII 419 f.); and if Dor. *κρυφᾶ* Att. *κρυφῇ*, like *πάντη*, are to be classed with the instr. Att. *πῇ ταύτη* (§ 276), which has more to say for itself then Schmidt's view that they are nom.-acc. pl. neut. (Pluralb., pp. 40 f.), then *κρυφᾶ* too will be instrumental. No hesitation need be felt in deriving Lat. *ped-e* from **ped-a*; it is quite possible phonetically (see I § 97 p. 91). There would be more cause for doubt in deriving Umbr. *-e* from **-a*, because of words in which *a* has not been weakened, as tu-plak (see § 225 p. 106) *procanurent* '*procinuerint' prehabia 'praehibeat'. But these forms prove nothing for final *-a*. No other examples are found which can explain the treatment of pr. Ital. unaccented final **-a*; but it is important to notice that **-o* becomes *-e*, in *ere* 'is' = Skr. *ēṣá* Idg. **eḯ-so* (§ 413) and in *este* for **esto*, **estod* = Lat. *istu-d* (§ 417). When we remember, too, that **-i* becomes *-e* when final, but not otherwise, as in the nom. acc. neut. sakre and in *ote* (Osc. *avti*), we see that there is no need to hesitate in assuming that **-a* became *-e* in Umbr., and that pure comes from *pura. This is not the only instance of special laws affecting the vowels of final syllables in Umbrian; others are the fluctuation between *ō* (u) and *ā* (I § 105 p. 98), and between *a* and *e* in *ocar pacer*, from the stems *ocri- pacri-*.

Perhaps Keltic may throw some light on the question. As far as I can see, *-e* in Gall. *are- ande- ate-* may come from *i*, notwithstanding *ambi-*. What is the relation of the O.Ir. proclitic *ar* and *ad- at-* to *air* and *aith-*? Are we to gather that pretonic *-e* has become *-a* (**ara- *ata-*)?

With the final *-o* and *-e* of *o*-stems this ending became

-ō or *-ē* in the parent language; with the ending of *ā*-stems it contracted to *-ā*, with that of *i̯ē*-stems to *-i̯ē*. *i-* and *u*-stems show *-ī* and *-ū*; Osthoff (Morph. Unt. II 139 f., Perf. 573) explains these as due to "proportional analogy", following the endings *-ō -ē*, *-ā*; that is, that given *-o -e* : *-ō -ē*, and *a* : *ā*, it was natural to suppose that *i* and *-u* would have *-ī* and *-ū* for the corresponding ending.

2. Secondly, the suffixes **-bhi* and **-mi* are used for the instrumental of nouns in various Idg. languages; **-bhi* in Armenian and Greek, **-mi* in Aryan, Balto-Slavonic, and doubtless in Germanic; besides which one example of each is found in Keltic. The same suffixes are used in pronouns. They are connected etymologically with other *bh-* and *m*-suffixes which from the proethnic period onwards have formed various cases of nouns and pronouns in all three numbers. Examples are: Skr. dat.-abl.-instr. dual *áśvā-bhyām* dat.-abl. pl. *áśvā-bhyas* instr. pl. *áśvā-bhiš* from *áśvā-* 'equa', dat. *tú-bhyam* 'tibi' *asmá-bhyam* 'nobis', O.C.Sl. dat.-instr. dual *pa̯tĭ-ma* dat. pl. *pa̯tĭ-mŭ* instr. pl. *pa̯tĭ-mi* from *pa̯tĭ* 'way' (instr. sing. *pa̯tĭ-mĭ*), dat. loc. *te-bĕ* instr. *to-boja̯* from *ty* 'thou'.

A number of words contain elements which remind us of the suffixes with *bh*, but have nothing to do with forming cases; and I would offer the conjecture that the two groups are etymologically connected. The *-φι* in *σ-φί στρατό-φι* is the same as in *ἀμ-φί*, and with this are connected *ἄμ-φω* Lat. *am-bō* Skr. *u-bhāú* Goth. *bái*, and perhaps Skr. *sa-bhā́* 'assembly, place of assembly, court' Goth. *si-b-ja* 'kin', Gr. *φί-λο-ς* and some other words. Cp. Johansson, Bezz. Beitr. XIII 122 f. Since *bh* belonged specially to the instrumental, whose original meaning was sociative and comitative, one would be inclined to suggest that the original meaning of this root was that of being paired or together (this has been put forward already, § 186 pp. 61 f.). There will have been parallel forms **bho-* and **bhi-*, related somewhat in the same way as **qo-* and **qi-* (§ 410). Then *bh* spread from the instrumental to other cases, as in pronouns

-sm- (e. g. Skr. *tásmin*) and *-si̯-* (e. g. Skr. *tásyās*) spread from one case to the others which show them (§§ 424, 425). The *m*-suffixes, *-mi* etc., are to be set down to another root. It may be conjectured that in the parent language these two elements came in contact at some point, and had some one use in common, which made them influence each other in form. But what the exact forms and uses of each were to begin with can no longer be made out. Generally speaking, the *bh*-forms are preferred in Aryan, Armenian, Greek, Italic, and Keltic, and the *m*-forms in Germanic, Baltic, and Slavonic. For a general discussion of these suffixes the following references may be given: Sievers, Paul-Braune's Beitr. IV 391; Bartholomae, Handb. der altiran. Dial. p. 68 footnote 1; the Author, Techmer's Internat. Zeitschr. für allgem. Sprachwiss., I 241 f.; Henry, Mém. de la Soc. de ling., VI 102 ff.; Strachan, Bezz. Beitr. XIV 174 f.

§ 275. I. Instrumental forms with the Suffix *-a* (*-e*).

1. *o*-stems. Pr. Idg. **u̯l̥qō* 'with a wolf'; and side by side with *-ō* is *-ē*, as **jugē* 'with a yoke'; cp. § 240 p. 133.

Skr. Ved. *vṛ́kā*, Avest. *vehrka* O.Pers. *kārā* 'with a people or host'. In Greek only adverbs are left: *-ō*, the pronominal *πω* in *οὔ πω* etc. (O.Sax. *hwō* 'how, in what degree'), whilst it is doubtful whether any adverbs like *οὕτω καλῶς* fall in this class, and if so, which of them (see § 241 p. 135); *-ē*, Tarent. *αἰῆ* beside loc. *αἰεί* (§ 263 p. 165)[1]), and in adverbs from pronoun-stems such as Lac. *πή-ποκα* (cp. Att. *πώ-ποτε*), Gort. *ἦ ὄ-πη* (cp. Goth. *hvē* 'with which, for how much, perhaps'), Cret. Heracl. Cypr. Att. *ἦ* 'if' beside (loc.) *εἰ* 'if'[2]). In Latin, certain adverbs come into this class, as *quō*

1) The old grammarians accent the word wrongly *αἰῆ*, on the analogy of *αἰεί*.

2) In Attic, *ἦ* is contained in *ἐάν* and *ἄν* for *ἦ-ἄν*, whilst *εἰ-ἄν* became *ἐ(ι)άν ἤν*. However, *ἐ(ι)άν* may possibly have become *ἄν* after *καί* and like words, cp. *ὑγιᾶ* beside *σαφῆ* for *-ε(σ)α* (the Author, Gr. Gr.[2] § 10 p. 27).

(cp. Umbr. *sei-podruh-pei* 'utroque' *ulo* ulu 'illo, illuc') *cito modo*, *bene male*; and it seems best to add *ārē āre* in *ārē--bam āre-facio (facit āre)*, *suē-* in *suē-bam -suē-facio* and the like (Wiedemann, Beitr. zur altbulg. Conj. 125 f., and Bartholomae, Bezz. Beitr. XII 91). O.Ir. *fiur* for **firu*, *cēliu*, see below. O.H.G. *tagu*, later *tago*; from words with a long initial syllable regular forms are only occasionally met with, e. g. *hūs* (I § 661. 2 pp. 517 f.), for they usually have the ending of forms with a short initial syllable as *wolfu wolfo* (cp. *gebu* : *wīs* : *erdu* § 276); *ō* is kept in O.Sax. *hwō* 'how'; in Gothic we find *-ē*, *hvē* = Gr. Lac. *πῇ-ποκα*; see below. Lith. *vilkù*, cp. *gerŭ-ju* beside *gerù*, I § 664. 3 pp. 523 f. In Slavonic, the instr. in *-ē* is contained in comparatives in *-ĕ-jĭ*, as O.C.Sl. *novĕ-jĭ* (II § 135 p. 437) and in the first part of the periphrastic imperfect, as *nesĕ-achŭ* from *nès-ti* 'to carry' (see Wiedemann, *loc. cit.*).

In Aryan, the ending Idg. *-ē* (not *-ō*) seems to be vouched for by Skr. *paścā* 'behind' Avest. *pasca* 'after, afterwards' with *c*, as compared with the abl. Avest. *paskāp* 'behind, afterwards' with *k* (I § 445 p. 331); the latter form therefore has Idg. *-ōd* (§ 241 pp. 134 f.).

In Sanskrit the ending *-ēna* as *vṛkēṇa* is commoner than *-ā* in the Veda, and is universal in the classical language; This is a re-formation following the pronouns, see § 421. Vedic has also *-ēnā* instead of *-ēna*, as *šūriyēṇā*, *tḗnā*, which is probably due to the influence of the older instrumental formation in *-ā*, as *vṛkā* (J. Schmidt, Kuhn's Ztschr. XXVII 292; Wackernagel, Das Dehnungsgesetz der gr. Compp., 13).

Keltic. Forms like *fiur cēliu* (Gall. e. g. *Alisanu*) must be instrumental. This is proved by the way in which they are used. Without a preposition, they always have the instrumental meaning (for even with comparatives they are doubtless instr. and not abl.).

Remark. *fiur* has often been taken for a dative in orig. *-ōi̯*. This assumption can hardly be made good, because the dat. of *ā*-stems,

tuaith, must be derived from **teu̯tāi̯*, whether we choose to regard this form as dative or locative (§ 249 p. 147, § 264 p. 167), and *-āi̯* must have been intermediate between this ground-form and the form actually found (cp. I p. footnote 1). I make this observation on account of what is said by Strachan, Bezz. Beitr. XIII 131.

Germanic. O.H.G. *tagu* may also be explained as abl. in *-ōd* (§ 241 pp. 134 f.). *demu* is certainly ablative, see § 423.

Goth. *vulfa* may be considered an instr., in Idg. *-ō* or *-ē*, without doing violence to any phonetic law. But it may also be abl. in *-ēd* (§ 241 pp. 134 f.), dat. in *-ē(i̯)* (§ 246 p. 146). or loc. in *-oi̯* (§ 263 p. 165). Cp. *þamma*, which may be taken for either abl. in *-ēd* (cp. Skr. *tásmād*) or dat. in *-ē(i̯)* (cp. Skr. *tásmāi*); see § 423.

Should we add to this class Goth. adverbs like *ubila-ba* (see § 241 p. 137)?

Streitberg (Die germ. Comp. auf *-ōz-*, p. 37) explains such adverbs as Goth. *ga-leikō* O.H.G. *gi-līhho* 'similar, like' and Goth. *svarē* 'in vain' as being forms in **-ōm* and **-ēm*, that is *-ō* and *-ē* + the particle **em*. But *ga-leikō gi-līhho* may also come from Idg. *-ām*; see § 276 p. 180. A third explanation was mentioned in § 213 p. 90. Views by no means to be adopted are set forth by Mahlow, Die langen Vocale 54, 131, and Hanssen, Kuhn's Ztschr. XXVII 614.

Lithuanian. In dialects and in O.Lith. is found also *vilkumì*, an extension of *vilkù* by *-mi* like *tû-mì*, § 421.

§ **276.** 2. *ā*-stems. Pr. Idg. **eḱu̯ā* 'with a mare'. Skr. Ved. *áśvā*, Avest. *haẹna*, see below. Greek Cypr. *ἀρᾶ* 'ex voto' and the like, see below; all other examples are adverbs (from nouns or pronouns): Ion. Att. *κρυφῇ λάθρῃ* (Att. *λάθρᾳ*) *πάντῃ πῇ ἧ*, Lesb. *ἄλλᾱ ὄπ-πᾱ*, Dor. *κρυφᾶ ταυτᾶ ἃ-τε*; the adverbial crystallisation is clearly shown in the re-formate *πάντ-η* (cp. *Κικυννοῖ* § 263 p. 164)[1]; cp. below. O.H.G. *gebu*,

1) J. Schmidt's conjecture (Pluralb. 40) that *πάντη* is a nom. acc. pl. neut., is opposed to the meaning of the word, which cannot be separated from *πῇ*, *ταύτη* and so forth.

later *gebo*; with *-u* dropped after a long initial syllable *wīs* ('manner, wise'), and with the ending assimilated to *gebu* we have *erdu* ('earth') *slahtu* ('kind, species') etc.; cp. *tagu* : *hūs* : *wolfu* § 275 p. 177; O.Icel. *drotningo* ('queen') *fiǫðr* ('feather'), cp. Noreen, Paul's Grundr. I 491. On Lith. *rankù* O.C.Sl. *rąką*, see below.

Aryan. In Vedic *-ayā* is found with nouns, but more rarely than *-ā*, e. g. *áśvayā*; and this became universal in the later language. In Avestic *haęnaya* is far commoner than *haęna*. *-ayā* came from the pronouns (*táyā*, see § 422), and was doubtless intended to avoid the same ending in the instr. and nom. sing. Cp. O.C.Sl. *rąkoją* (beside *rąką*), also an adformate of the pronouns (*toją*); see below.

Remark 1. There is a group of Sanskrit adverbial forms from *o*-stems, ending in *-ayā́*, as *ṛtayā́* 'rightly' (stem *ṛtá-*) *svapnayā́* 'in a dream' (*svápna-*). Perhaps these are modelled upon the pronominal adverb *ayā́* 'in this way'. See J. Schmidt, Pluralb. 212 ff., where however only those adverbs which are built up on adjective stems, as *ṛtayā́*, are so explained. Another explanation is offered by Bartholomae in Bezz. Beitr. XV 20 f. Cp. § 279 Rem.

Greek. In Cyprian the old form in *-ā* seems to have remained in use as an ordinary case, and the dative forms in *-āi̯* (*-āι*) seem to have lacked the instrumental meaning (Meister, Gr. Dial. II 295 f.). In the other dialects, instrumental uses had all passed over to the dative form, and the instr. form in *-ᾱ* survived only as fossilised in adverbs. But in time these very adverbs in *-ᾱ*, and the dative in *-ᾱι*, ran together into one form. In Attic inscriptions of the classical period they have almost always the ending of the dative, as *ἰδίᾳ*, *ἕᾳ*, and similarly in Gortynian *ᾳ*, *ἄλλᾳ*. Forms in *-ᾱ* are related to these in the same way as e. g. adv. *οἴκοι* to adv. *κύκλῳ*, adv. *Πλαταιᾶσι* to adv. *Πλαταιαῖς* (the Author, Gr. Gr.[2] p. 210). Later on *-ᾱι* and *-ᾱ* ran together in the regular course of things, see I § 132 p. 120. In Homer *λάθρῃ πάντῃ*, the true instrumental, are still used; which is proved by the fact that in thesis before vowels *η* is always shortened, but *ῃ* as a rule is not (J. Schmidt, Plur. 40).

Remark 2. In Attic, η and ῃ represented different sounds even as late as the Christian era; but ει was written sometimes instead of η (the Author, Gr. Gr.[2] p. 36). Now adverbs like ἦ, κοινῇ, πανταχῇ are sometimes written with ει (Meisterhans, Gr. der att. Inschr.[2] p. 114); which proves beyond a doubt that the iota adscript in ῃ is right, and therefore that the form is dative.

Whether any of the Latin adverbs in *-ā*, such as *hā-c ūnā rectā dextrā*, are instrumental cannot be made out. *frūstrĕ contrĕ* may possibly be so, but the short vowel must then be due to analogy (I § 655. 2 pp. 502 f.)[1]).

Lith. *rankà* (for **rankā*, the original long vowel kept in *gerá-ja* beside *gerà* 'cum bona') is pronounced in some dialects *runku*, in Lettic *rûku*, which gives **rankān* or **rankām* as the Baltic ground-form. This is confirmed by O.C.Sl. *rąką*, a form rare, it is true, in the remains of O.C.Sl., but also found in West-Slavonic, and therefore proethnic in that branch of the language. The usual instr. of O.C.Sl. is *rąkoją*, an adformate of pronouns like *toją* (§ 422), cp. Skr. *áśvayā* following *táyā*. Afterwards the analogy of *rąkoją* suggested *noštĭją* and *materĭją* (§§ 278, 282). The difference between Skr. *áśvā táyā áśvayā* and O.C.Sl. *rąką* Lith. *rankà* O.C.Sl. *toją rąkoją* is merely that the latter group have another affix **em*, which we saw in the Skr. locative ending *-yām* §§ 264, 265 pp. 167 f.; cp. § 186 p. 62. It still remains a question whether the instr. ending *-ām* is also represented by adverbs such as Skr. *uttarám* 'further' Gr. ἀντιβίην Lat. *palam perperam* and Goth. *ga-leikō* O.H.G. *gi-līhho* (cp. § 275 p. 178).

In Lith. there is a re-formation with *-mi*, as *kalbumì* (*kalbà* 'speech'), *duonomi* (*dúna* 'bread'), according to Mikuckij (Kuhn-Schleicher's Beitr. I 240 f.), cp. *vilkumì* § 275 p. 178.

§ 277. 3. *i̯-* *i̯ē*-stems (cp. p. 68 footnote 1). Pr.Idg. **bhr̥ĝhn̥t(i)i̯ē*. Skr. *br̥hatyā́ dēviyā́*, Avest. *barentya*. Lat. *faciē* Umbr. uhtretie 'auctoritate', but these may be regarded

1) O.Ir. *echtar* 'extra' (Mid.Cymr. *eithyr*) has often been derived from **echtrā* (cp. *briathar* I § 634 p. 475). But more probably it had the same ending as *eter*. *-ar* because of *-cht-*, see Thurneysen, Kuhn's Ztschr. XXVI 311 footnote 1.

as ablative, see § 243 p. 139. Mid.Ir. *insi* (*-i* for **-iī*, and a step further back **-i̯i̯ē*), but this may be dat. (§ 248 p. 149) or loc. (§ 265 p. 168). Lith. *žemè*, see below.

Vedic has a few examples with *-ī* (*-i*), on the analogy of *i*-stems (§ 278), as *śámī* (*śámi*) from nom. *śámī* 'work'. A few scattered examples of the same kind are found in Avestic: *azī*, stem *azyā- azī-* 'cow'.

O.H.G. *kuninginnu* following *sipp(i)u gebu*, see § 276 pp. 178 f.

Lith. *žemè*, O.C.Sl. *zemlją* (*-ją* = **-i̯ēm* as in the acc. sing., see § 216 p. 92) *zemljeją* are to be explained in the same way as *rankà*, *rąką rąkoją* § 276, preceding page. Be it observed, also, that in Lith. dialectic *-i* instead of *-e* points to an older **-ēn* with just as much certainty as *runku* instead of *rankà* points to **rankān*.

§ 278. 4. *i*-stems. Pr.Idg. **ou̯ī* from **ou̯i-s* 'ovis', which seems to have been used as a dative even then, see § 249 p. 150. Skr. Ved. *matī́* from *matí-ṣ* 'mind, spirit, devotion'; Avest. *aži*. It is more probable that Lesb. Boeot. Dor. Ion. *βάσῑ*, *πόλῑ* have Idg. *-ī*, than that they come from *-u* (loc.), see § 266 p. 169. Lat. *turrī*, Umbr. *poni* puni *pone* 'posca', but these may be ablative in pr. Ital. *-īd* (§ 243 p. 139); cp. pronominal adverb *quī* from *qui-s* (§ 421). O.Ir. *fāith* for **u̯ātī*, see below. O.H.G. *ensti*, *steti* (*stat* 'place'), see below. Lith. dial. *akì*, see below.

Aryan. Only the Veda has *-ī* in feminines; this is shortened to *-i* before a vowel or at the end of a 'pāda' (see Lanman, Noun Infl. 380 f.). Side by side with *-ī -i* the following endings are found in Sanskrit:

1. *-yā*[1]) in Vedic both masc. and fem., later almost exclusively fem. It is probable that this ending is the weak *i*-stem + instr. suffix *-ā* (§ 280), cp. *krátv-ā* = Avest. Gāthic *xraþw-ā* (§ 279), and was not borrowed from (fem.)

1) Possibly O.Pers. *āpiyā*, Beh. I 95, is such a form. The passage is mutilated, and the form may be loc. sing.

ī- *i̯ē*-stems (*bṛhatyā́*). But since the same ending *-yā* is found in fem. *ī-* *i̯ē*-stems, it was gradually restricted to feminines among the *i*-stems; and the point of contact thus gained betwen these two classes of stems doubtless suggested the further step of coining gen. *ávyās* dat. *ávyāi* loc. *ávyām* (§ 231 p. 120, § 249 p. 150, § 266 p. 168); compare the re-formates *dhiy-ā́s dhiy-āí dhiy-ā́m* beside *dhiy-ā́* (§ 280). The only masc. in *yā* which held its ground in later Sanskrit is *pátyā*, which was preserved by the dat. *pátyē* see § 231 p. 120, § 249 p. 149.

2. *-y-a* in "gerunds" from verbs compounded with a prefix; as *prati-bhíd-y-a* (orig. 'with splitting'): Germ. **biti-* 'bite, bit' O.Sax. *biti* O.H.G. *biz*; *ā-gam-y-a* ('with approaching'): Germ. **kumi-* 'a coming' O.Sax. *kumi* O.H.G. *chumi*; *ā-ga-ty-a* ('with approaching') beside *gá-ti-ṣ* Gr. *βά-σι-ς*. When this formation was produced, consonantal stems must still have had *-a*, not yet changed to *-ā* (§ 280). It is therefore very closely connected with (1) *-y-ā*; *-a* being kept because the ordinary case meaning had sunk out of sight in these verbal nouns (on the same principle, old case-endings remain in the Greek infinitives *δό-μεν* § 257 p. 158 and *δό-μεν-αι* § 251 p. 135). In the Veda, gerunds often end in *-yā* as well as *-ya*; the reason being not so much the analogy of the living instrumental case, as that of gerunds in *-tvā́* (§ 279).

3. *-inā*, *ávinā*. This formation is due to the analogy of *n*-stems (cp. § 393). Even in the Veda, it is the commonest instr. for the masc.-neut., and is found in a few feminine words; in later Sanskrit it is the regular ending of the masc.-neut. instrumental.

Old Irish *fāith* is probably instrumental, simply because has the form without a preposition only the instr. meaning (cp. § 275 p. 177). But as far as form goes, it might be locative, cp. § 260 p. 160.

Old High German feminines, such as *ensti* (*anst* 'favour'), which may be loc. in orig. **-ēi̯* or **ei̯-i* (§ 260 pp. 160 f., § 266 p. 169), may also be the instr. in *-ī*. *-i* is regular only

in words whose first syllable is short, as *steti*; although most forms with a long first syllable, as *ensti*, have *-i* too, yet a few remain in which developement has been regular, as *anst* (*mit dīnera anst* 'with thy favour'). Compare von Bahder, Die Verbalabstracta, pp. 19 f.; Osthoff, Paul-Braune's Beitr., VIII 262. *-i* is found in a very few masculine words, as *quidi* ('law-suit'); see Kögel, Über das Keron. Gloss. p. 158, and Osthoff, *loc. cit.* The usual masc. ending is *-iu*, which follows the *i̯o*-stems (*hirtiu hirtu*), e. g. *gastiu gastu*; cp. the pronoun *hiu* in *hiu-tu* 'to-day' beside Goth. *hi-mma* as compared with *diu* from the stem *dia-* (II § 4 p. 10, III §§ 409, 421).

In Lithuanian, the original formation is perhaps represented by dialectic forms such as *akì* from *akì-s* 'eye'. Elsewhere the ending is *-mi*, as *nakti-mì aki-mì* (§ 282); compare the pronoun *manì* beside *manimì* § 449. In Slavonic, the datives *pąti nošti* are specimens of the old type, if we were right in conjecturing that they are instrumental (§ 249 p. 150); compare pron. instr. *či* (Mod.Slov. 'if' Czech. 'whether') beside *čĭ-to* 'quid' (§ 421). With instr. meaning we have masc. *pątĭ-mĭ* (§ 282), fem. *noštĭją noštiją*, the latter of which is an ad-formate of *rąkoją* (§ 276 p. 180).

§ **279.** 5. *u*-stems. Pr.Idg. **sūnū* from **sūnu-s* 'son'. Avest. *bāzu*. Lat. *manū*, in which there has been a confluence of the instr. and the ablative in *-ūd* (§ 243 p. 141). O.Ir. *biuth*.

Aryan. In both branches of Aryan we meet with a formation which is modelled upon consonant stems. Vedic: fem. and masc.-neut.: *hánv-ā hánuv-ā* (*hánu-* f. 'jawbone') *krátv-ā krátuv-ā* (*krátu-* m. 'strength, will, understanding'), *mádhv-ā* (*mádhu-* n. 'sweetness'). Of the same kind are instr. from masc. *tu*-stems which are used as gerunds, e. g. *śru-tvā́* orig. 'with the hearing', see II § 108 p. 327. In Avestic, we find not only *bāzu* but *bazv-ā*, Gāthic *xraβw-ā*.

In later Sanskrit the ending *-vā*, like *-yā* in *i*-stems, is confined to the feminine and the gerunds; and corresponding to the re-formates *ávyās ávyāi ávyām* in *i*-stems there is

a similar set of *u*-forms, as *dhēnvás dhēnvāí dhēnvā́m* from *dhēnú-* 'milch cow' (§ 232 p. 122, § 250 p. 152, § 267 p. 169); compare the re-formates *bhruv-ás bhruv-āí bhruv-ā́m* beside *bhruv-ā́* (§ 280). An ending *-unā*, produced by the analogy of *n*-stems (§ 393), is the only one used with masculine and neuter words in later Sanskrit, e. g. *sūnúnā*. Even in the Veda this is by far the commonest ending for masc. and neut. instr.

Remark. As regards the Aryan adverbs in *-uyā*, as Skr. *āšuyā́* Avest. *āsuyā(-ca)* 'quickly' (from *āšú-* *āsu-* 'quick'), the student may consult J. Schmidt, Pluralb. 213. Perhaps, as he suggests, these are adformates of *amuyā́* 'in that wise'. A different view is taken by Bartholomae, Bezz. Beitr. XV 21. Cp. § 276 Rem. 1.

Germanic. Perhaps we should place here O.Icel. suffixless datives which have suffered a *u*-modification or "umlaut" of the root vowel, as *vǫnd* from nom. *vǫndr* 'branch'. O.H.G. instr. in *-iu -u*, as *sitiu situ*, are really locative forms (§ 267 p. 169) which have added the instrumental meaning to their own through being associated with the instr. sing. of *i*-stems (*gastiu gastu*, (see § 278 p. 183).

§ 280. 6. All remaining Stems.

Aryan. In Sanskrit the regular ending is *-ā*, the stem having usually the same weak form as the dative singular. This *-ā* came originally from stems in *-o-*, also the source of the ending of the nom.-acc. dual, *-āu -ā* (§ 289). Why the original short *-a* (cp. *-bhídy-a*) was altered cannot be made out. However, it is not by any means clear whether the Iranian endings Avest. *-ā̆* O.Pers. *ā-* represent pr.Ar. *-a* or **-ā*; if the latter, the change of *-a* to *-ā* will be proethnic Aryan; cp. I § 21 p. 25, § 649 p. 495. A consideration of the Sanskrit gerund in *-ya* would incline one to believe that it is only in Sanskrit that this ending was borrowed from *o*-stems.

Skr. *šún-ā ášman-ā* Avest. *sūn-a asman-a*; on Ved. *prēṇā́* from *prēmán-* 'love', *bhūnā́* from *bhūmán-* 'plenty, crowd' see Streitberg, Paul-Braune's Beitr. XIV 205 f. Skr. *mātr-ā́ dā́tr-ā* Avest. *māþr-a dāþr-a*. Skr. *bṛhat-ā́*

Avest. *ber^e^zat-a ber^e^zant-a.* Skr. *mánas-ā* Avest. *manaŋh-a*; Skr. *áśīyas-ā* Avest. *āsyaŋh-a*; Skr. *vidúṣ-ā* Avest. *vīdūš-a.* Skr. *dhiy-ā́ bhruv-ā́*; the likeness of *dhiy-ā́* to *dēviyā́* etc. (§ 277 p. 180) produced a new set of forms, *dhiyā́s dhiyāí dhiyā́m* beside *dhiy-ás dhiy-ḗ dhiy-í*, *bhruvā́s bhruvāí bhruv-ā́m* beside *bhruv-ás bhruv-ḗ bhruv-í* (§ 233 p. 123, § 255 p. 156, § 268 p. 170), cp. *ávyās dhēnvā́s* and similar words § 278 p. 182, § 279 p. 184. Skr. *tanúv-ā* Avest. *tan(u)v-ā̆.* Skr. *nāv-ā́*, *gáv-ā* Avest. *gav-a.* Skr. *viś-ā́* (*víś-* 'settlement, house, community, stock, family'), Avest. *vīs-a* O.Pers. *vīϑ-ā* (*vīsvīϑ-* 'village community, clan').

In Greek stems such as we are now discussing, locative forms took over the instrumental uses. Only fossil instr. forms survive in certain adverbs, as *πεδ-ᾱ́ ἅμ-α*; see § 274 p. 174. There were sufficient reasons for the disuse of such instrumental forms. The accusative singular masc. fem. had come to have the same ending *-α* (= *-m̥*); and besides, the original difference in stem between these two cases had disappeared long before in proethnic Greek. *πεδ-ᾱ́*, used in Aeolic and Doric with the same meaning as *μετ-ᾱ́*, meant originally 'with one's foot' = 'at one's foot, immediately behind or with one', cp. Armen. *het yet* 'behind, after, with' from the same root-noun. *παρ-ᾱ́* beside dat. *παρ-αί* gen. abl. *πάρ-ος* and loc. *πέρ-ι*. *ἅμ-α* from *εἷς* for **sem-s* 'unus', cp. Dor. *ἁμᾶ* which follows the analogy of instr. adverbs from *ā*-stems (§ 276 p. 178). **ϝεκ-α* in *εἵνεκα ἕνεκα* 'on account of' (for *ἑν-ϝεκα*, I § 166 p. 146) and in *ἑκά-ϝεργο-ς* 'working at one's own will, with unhampered judgement' beside O.Pers. loc. *vas-iy* 'much, very', properly 'in choice or liking, at pleasure' (unless we are to read *vasaiy*, loc. from a stem *vasa-* = Skr. *váśa-*). Cp. Osthoff, Zur Gesch. der Perf., 334 ff. and 574 ff.

Italic. In Latin the ending is *-e*; there has been a confluence of the instr. and the locative in Idg. **-i*: *carn-e homin-e*, *mātr-e datōr-e*, *ferent-e prae-sent-e*, *gener-e ōciōr-e*, *su-e*, *nāv-e*, *bov-e.* These forms added the ablative function to their own, and are consequently called ablative in the

grammars; cp. § 243 pp. 140 f. Umbrian too seems to possess the instr. with the ending *-e*, see § 274 with the Rem. p. 174.

From Keltic no undoubted examples can be cited. But it must be observed, that if the Idg. ending was really *-e* and not *-a*, there is no phonetic difficulty in regarding as instr. the forms which we have already explained as dat. or loc. (§§ 251 ff. and 269 ff.), e. g. *coin*, *māthir*, *carit*.

Neither can any certain examples be found in Germanic. But, as in Keltic, some or all of the forms which we regarded as loc. in **-i* may be instrumental too: all, if **-e* was the Idg. ending (for **-e* became **-i* in proethnic Germanic, see I § 67. 4 p. 58), some at least, if it was **-a*. Examples of such possible instrumentals are Goth. *frijōnd* O.H.G. *friunt*.

§ **281.** II. Instrumental Forms with the Suffix *-bhi* or *-mi*. A general account of these suffixes has been given already, in § 274 pp. 175 f.

a. The Suffix *-bhi*.

Armenian. *-b*, becoming *-v* after a vowel (I § 485 p. 358), cp. instr. pl. *-bk̑ -vk̑* § 379. *o*-stems: *gailo-v* from nom. *gail* 'wolf', cp. Gr. *θεό-φι*. Proper names have *-a-v*, as *Trdata-v*, compare what is said on the gen. *Trdatay* in § 239 p. 130. *i*-stems: *srti-v* from nom. *sirt* 'heart'. *u*-stems: *zardu* for **zardu-v* (cp. instr. pl. *zarduk̑* for **zardu-vk̑*) from nom. *zard* 'adornment'. *akamb* from nom. *akn* 'eye', *-amb* = **-n̥-bhi*, cp. Ir. *anmimm anmaimm* below. *mar-b* from *mair* 'mother', *dster-b* from *dustr* 'daughter'.

Old Irish. Neuter *n*-stems have **-bhi*, as *an-mimm an-maimm*, if we are to take **-mn̥-bhi* as the ground-form (I § 243 p. 201, § 520 p. 378, § 657. 1 p. 506); cp. *-b n-* and *-b* in the instr. dual and plural (§§ 296 and 379). But the ground-form may be **-mn̥-mi*; cp. what is said in § 379 on the Avestic instr. sing. *nāmēnī*.

Greek. Beside *-φι* we find *-φιν* (as *σ-φίν* beside *σ-φί*, § 449), which may represent an Idg. **-bhi-m* (§ 186 p. 62; Leskien, Ber. der sächs. Ges. der Wiss., 1884, p. 102; and

the Author's Gr. Gr.[2] p. 134). *o*-stems: *θεό-φι(ν)*. *ā*-stems: *ἀγέλη-φι(ν)*. *es*-stems: *ὄρεσ-φι(ν)*. *ī-* *i̯i̯*-stems: *ἴ-φι*. *ναῦ-φι(ν)*. *κράτ-εσφι(ν)* is a re-formate like *φερόντ-εσσι*, *κοτυληδον-όφι* another like *φερόντ-οις* (§ 360). Then there are the adverbs *ἔννη-φι(ν)*, *νόσφι(ν)*, *λικρι-φί-ς*, the last extended by the same *-ς* which is seen in *ἀμ-φί-ς* (§ 241 pp. 135 f.); *ἀμ-φί-ς* too must be added to the list.

Such of these forms as are not adverbs were living cases in the language of Homer and his imitators, but now here else. They were used for the instrumental, locative, or ablative; and no difference at all was felt between them and the other forms which were used for these cases, as is clear from phrases like *ἅμ' ἠοῖ φαινομένηφι*. Now and then Homer has them in the sense of dative or genitive; but this was because they had by that time become archaisms, and the linguistic instinct of those who then used them could not clearly distinguish the meanings which they might legitimately have. To extend their applicability thus was an easy matter. In their instrumental use they were associated with the instr. *ἵππῳ χώρᾳ* etc., which might also be dative; and in their ablative use with the abl. *ἵππου χώρᾱς* etc., which might be genitive (cp. *ἐμέ-θεν* used as gen., § 244 Rem. 2 p. 143). How these forms came to be used for instrumental, locative, and ablative (no distinction is made between *-φιν* and *-φι* as case-suffixes) is uncertain. The *φι*-cases could be either singular or plural; e. g. *Θ* 474 *παρὰ ναῦφι* 'beside the ships', *et saepe* (for details see Kühner, Ausf. Gr. I[2] pp. 380 f.). So, too, in Gallic, *-bo* is used in the sense of Lat. *-bos -bus*, and in Germanic *-m* for **-mi* (or **-mo*) can be used for the plural, on which matter see § 367; and be it remembered that *σ-φί(ν)* is not restricted to one number. It appears that in Indo-Germanic itself the instr. *-bhi*, *-mi*, and the corresponding suffix of the dat.-abl., were not yet completely pluralised by the addition of *-s*.

§ **282.** b. The Suffix *-mi*.

Sanskrit and Germanic afford but scanty materials for tracing this suffix. Skr. *sanē-mi* adv. 'from olden days'

from *sána-* 'old', formed like O.C.Sl. *tě-mĭ* from *to-* 'the, that'; with the stem final cp. instr. pl. *sánē-bhiš* (§ 380). In Germanic *-mi* is conjectured to be the suffix of O.H.G. *zi houbitan* Mod.H.G. *zu häupten*, O.Icel. *at hǫfdum*, A.S. *miolcum* beside *mioluc* dat. of *mioluc* 'milk' (see Kluge, Paul's Grundr. I 386); a safer example is O.Icel. *þei-m* A.S. *đǣ-m* (§ 421). Of Irish words, *anmimm* may possibly contain *-mi*, see § 281 p. 186.

Remark. *-mi* is said to be the suffix of the Latin pronominal adverbs *ōlim*, *interim*, *istim istin-c*, *hin-c* and so forth; the orig. ending is supposed to be **-e-mi* (cp. Armen. *ardare-v* adv. beside *ardaro-v*, pp. 133 f.), which became **-imi -im*. But all this is thoroughly uncertain.

-mi is a living case suffix only in Balto-Slavonic, where from the proethnic Balto-Slavonic period onwards it has made the instr. sing. of *i-* and *u*-stems. Lith. *nakti-mì* (dial. *naktì*, see § 278 p. 183), O.C.Sl. masc. *pątĭ-mĭ* (while feminine words have the re-formation *-ĭją* following *-oją*, as *noštĭją noštiją*, see § 276 p. 180). Lith. *sūnu-mì*, O.C.Sl. *synomĭ* for **synŭ-mĭ*, which by a mere chance is not actually found (I § 52 p. 44). In the proethnic stage of Balto-Slav. the ending *-i-mi* was borrowed from *i*-stems by stems in *n*, *r*, and *s* (the same thing happened to the corresponding endings of the dual and plural *m*-cases, § 402): Lith. *akmen-imì* O.C.Sl. *kamen-ĭmĭ*; Lith. *mōter-imì*, but Slav., instead of **mater-ĭmĭ*, has *mater-ĭją mater-iją*, just as it has *noštĭją noštiją* instead of **noštĭmĭ* for the feminine (see above); Lith. *debes-imì* (cp. II § 132 p. 422) O.C.Sl. *sloves-ĭmĭ*. In Slavonic *-mi* is found with *o*-stems as well, as *vlŭko-mĭ*, also *vlŭkŭ-mĭ* on the analogy of *u*-stems (cp. Vetter, Zur Gesch. der nom. Decl. im Russ., pp. 22 f.); *zŭlo-dĕjĭmĭ* (beside *-dĕjemĭ*) with the old weak grade form of the suffix *-i̯o-*, see § 368. Compare further Lith. dial. *vilkumì* and *kalbumi*, § 275 p. 178, § 276 p. 180.

Nominative and Accusative Dual Masculine and Feminine.[1])

§ **283.** The Indo-Germanic system of dual cases was probably fuller than any of those which have been preserved in separate offshoots of the original language. It is true, there is reason to believe that there was only one form for the nominative, accusative, and vocative dual in each class of stems; but it is improbable that there were no more than two besides — one for dative, ablative, and instrumental, and one for genitive and locative. For one thing, the genitive and locative have different forms in Avestic (gen. *-å̄*, loc. *-ō*); but if there were no other reason, it would be improbable simply because in the different languages we find the same meaning given to endings which can neither be connected phonetically, nor be so manipulated as to suggest that one of them is original, and one due to analogy. No single ground-form can be given for these endings of the dat. (abl.) instr.: Skr. *-bhyām* Avest. *-byąm*, Avest. *-byă*, O.Ir. *-b n-* (in *dib n-*), Lith. *-m* (after which something must have dropped) and O.C.Sl. *-ma*, even if we disregard the different initial of the suffix, now *bh* and now *m*, and take off the affix **em* (see § 296). So we are drawn to conjecture that there was originally a different ending for the dat. (abl.) and the instr. But here we meet

1) For the Dual, see the following authorities: W. von Humboldt, Über den Dualis, Berl. 1828 (Ges. Werke VI 562 ff.). Silberstein, Über den Dualis in dem idg. Sprachstamm etc., Jahn's Jahrbb. Suppl. XV (1849) pp. 372 ff. Fr. Müller, Der Dual im indogerm. und semit. Sprachgebiet, Wien 1860. Meringer, Über den indogerm. Dual der *o*-Stämme, Kuhn's Ztschr. XXVIII 217 ff. Osthoff, Über den nom.-acc.-voc. dual. der *i*- und *u*-Stämme, Morph. Unt. II 132 ff. Fritzsche, De formis quibusdam numeri dualis in lingua Graeca, Rostock 1837. Bieber, De duali numero apud epicos, lyricos, Atticos, Jena 1864. Ohler, Über den Gebrauch des Dual bei Homer, Mainz 1884. Keck, Über den Dual bei den griech. Rednern mit Berücksichtigung der att. Inschr., Würzburg 1882 (M. Schanz' Beitr. zur hist. Synt. der gr. Spr. II). Doerwald, De duali numero in dialectis Aeolicis et Doricis quae dicuntur, Rostock 1881. Danielsson, Alte Dualformen im Latein, Pauli's Altital. Stud. III 187 ff. Ebel, Über den celtischen Dualis, Kuhn-Schleicher's Beitr. II 70 ff.

with a fresh difficulty. It is always possible that a given case had different endings in different stems, one of which was kept in one language, another in another. Thus we are as far from certainty as ever.

Remark. Following Benfey (Abh. der Gött. Ges. der Wiss., XIX 142 ff.), Mahlow and Meringer assume that Sanskrit has inherited from the parent language a special dual vocative in *-a* (Mahlow, Die langen Voc. 130; Meringer, Kuhn's Zeitschr. XXVIII 233). Meringer thinks that Gr. δύο may be an example of this formation. I believe that these forms must be otherwise explained; see § 289 Rem., § 293.

We shall see anon (§§ 285 and 311) that some dual forms have the look of singular cases, and that the dual idea is conveyed not by the case ending, but by the part of the word immediately preceding it, that is, by the stem.

A fairly large variety of dual noun forms may be seen in the oldest stages of Aryan, Greek, and Irish; and the dual is still living in some Lithuanian dialects, and in some Slavonic languages. Very few traces, if any, are to be found in Armenian, Italic, or Germanic, even in the earliest remains of these languages. In Italic and Germanic, the only words which can be so regarded are a few dual inflexions of the words *two* and *both*, and several noun forms which are explained, more or less hypothetically, as dual cases (see Danielsson's essay cited in the footnote to the preceding page, Kluge, Paul's Grundr. I 384, and Bartholomae, Stud. zur idg. Sprachgesch. I 61). Of Armenian words, *erku* 'two' and *uť* 'eight' (cp. Skr. *dvāú aṣṭāú*) may perhaps have dual endings which have undergone only regular change (cp. § 166 p. 7, § 172 p. 20).[1])

§ **284.** Let us now turn to a special consideration of the nominative and accusative masculine and feminine. The first thing to notice is that this form, like the nom. pl.,

1) The gradual decay of the dual, and the way in which it is absorbed into the plural, can be best traced in Lithuanian and Slavonic. But this very instructive piece of study cannot be gone into here. For the Lithuanian, see Brückner, Archiv für slav. Phil., III 262 f.; for Polish, Baudouin de Courtenay, Kuhn-Schl. Beitr., VI 63 ff.

could be used for the vocative; and when it was so used, like the nom. pl., the first syllable carried the accent in Sanskrit. Cp. § 200 pp. 82, 83.

Five proethnic types of formation may be distinguished, each belonging to a special stem or stems. (I) *-ōu̯ -ō* in *o*-stems: (II) *-ai̯* in *ā*-stems: (III) *-ī* in *ī- i̯ē*-stems: (IV) *-ī* and *-ū* in *i*- and *u*-stems: (V) *-e* in consonant stems, stems in *-ī- -ii̯-*, and stems in *-ū- -uu̯-*.

§ **285.** I. Masculine *o*-stems have the endings *-ōu̯* and *-ō*, **u̯l̥qōu̯ *u̯l̥qō*. Different explanations are given of these doublet forms.

Remark. Osthoff (Morph. Unt. IV 259), supported by Torp (Beitr. zur Lehre von den geschlechtlosen Pronomen, pp. 45 f.), holds that *-ō* was the original case-ending (*-ō* for *-o + e*, the ending of Gr. *πατέρ-ε*, or merely the suffix *o* lengthened, compare the *-ī* and *-ū* of stems in *-i-* and *-u-*, § 288); *-ōu̯* he believes to he this *-ō* + a particle *ŭ*. Both these endings, the older *-ō* and the later *-ōu̯*, be regards as having originated during the separate growth of separate languages; the former being used in Vedic by preference before consonants, and the latter before sonants, merely because it was easier to pronounce them so. Quite another view is taken by Meringer (Kuhn's Ztschr. XXVIII 217 ff.). Taking his stand upon the use of *-ā* and *-āu* in Vedic (see I § 645 p. 488), he assumes that the original case ending was *-ōu̯*, which became *-ō* before consonants in the parent language. Perhaps both these explanations may becombined as follows. We may suppose *u* to have really been an independent particle which became attached to the case ending *-ō*; but that the historical *-ō* (Skr. which we have *-ā* Gr. *-ω* etc.) is not directly descended from the unextended *-ō* which became *-ōu̯* in the manner suggested, but is the shape assumed by *-ōu̯* before consonants, as Meringer holds (*-ō* for *-ōu̯* like *-ē* for *-ēi̯*, see § 246 pp. 144 f.). *u* may be compared with *u* 'two' in **u̯-i- *u̯-o-* (seen in Lat. *vī-gintī* etc., see § 177, and Morph. Unt. V 23 ff.) and Skr. *u-bhā́u* 'both' (cp. Goth. *bái*);[1]) and then we might compare e. g. **tō-u̯* (= Skr. *tāú*) with Lith. *tū̃-du*, the dual of *tàs* 'the, that'. If the proethnic ending of the gen. dual of *o*-stems was **-ou̯s* or **-eu̯s* (Skr. *-ōs̆* O.C.Sl. *-u*), the same *u* might be contained in the

1) If the *u*- of *u-bhā́u* once meant 'two' or something of the kind, it is natural to connect the first part of Gr. *ἄμ-φω* Lat. *am-bō* with Goth. *an-þar* Lith. *añ-tra-s*, and to compare as follows: Skr. *u-bhā́u*: Gr. *ἄμ-φω* = *vŭ-torŭ*: Goth. *an-þar*.

genitive and we might regard *-s* as the singular genitive suffix. The Avestic loc. dual in *-ō* = Idg. **-oṷ* or **-eṷ* would be a form without any case suffix, just like, say, Gr. loc. *δό-μεν* beside nom. *ποι-μήν*. Compare Meringer, as cited, p. 233, and § 311 of this volume. We must, however, be careful not to infer from these facts that all dual cases were once formed by adding singular case endings to a dual stem. To explain such suffixes as O.C.Sl. *-ma* Skr. *-bhyām* as originally belonging to the singular would be an arbitrary assumption. It is quite likely that the cases of the dual are formed upon more than one principle.

Aryan. Skr. Ved. *vṛ́kāu vṛ́kā*; in the later language only *vṛ́kāu*, although the ending *-ā* is kept in compounds, as *dvā́-daśa* 'duodecim'. Avest. *vehrka* (*-āu* cannot be found, see Bartholomae in Bezz. Beitr. IX 307); O.Pers. *gaušā* from *gauša-* 'ear'.

In Armenian, *erku* 'two' and *ut* 'octo' may be isolated examples of this case ending; see § 283, page 190.

Greek *λύκω*, *δύω*; on *δύο* see § 293 pp. 197 f.

Latin has no dual form left except *ambō*, *octō*, *duo* (I § 655. 2 p. 502). Umbr. *dur* 'duo' has the plural flexion throughout; cp. § 166 p. 7.

Both endings are shwon in Irish. O.Ir. *dau dō*, older *dāu*, O.Cymr. Mid.Bret. *dou* 'two' = Skr. *dvāú*, and O.Ir. *dā* (before substantives) = Skr. *dvá* (I § 90 p. 85). In the unaccented final syllables of other dual words no trace can be found of the two endings side by side. O.Ir. has *dā fer*, whose origin is not quite clear (one would expect **dā fiur* like the instr. sing. *fiur* = **u̯irō*); the form looks like a nom. sing. It is true that there was a confluence of the nom. dual and the nom. plural in *i*- and *u*-stems and *r*-stems (*fāith*, *bith*, see § 288; *māthir*, see § 289); but it seems to me not at all probable that the form of the nom. sing. was used for the dual in masc. *o*-stems simply on this analogy. I may be allowed to suggest that the *-ō* of **duō* in **duō u̯irō* prevented **u̯irō* from becoming **u̯irū*, or changed it by backward assimilation, so that the phrase became **duā u̯irā* and then *dā fer*; while, conversely, in the feminine, *dā* was assimilated forwards to the ending of the substantive (§ 286). Thus the nom. sing. and nom. acc. dual came to have the same form in

o-stems, which had happened before in all other stems in the regular course of phonetic change; and it was in this way that the sing. masc. *tene* ('fire') and the sing. neut. *dliged*, *tech*, *ainm* came by the dual meaning which they have (as in *dā thene*, and so forth).

It is a question whether Gall. *verco-breto*, cited by Stokes, Bezz. Beitr. XI 142, 152, is to be translated 'the two judges', and to be regarded as an instance of the old dual formation. See Ernault, Mém. de la Soc. de ling., VI 158 ff.

Germanic. The only clear survivals of this dual form are O.Icel. *tvau* 'two' (which has become neut., see Streitberg Die germ. Compar. auf *-ōz-* p. 33) = Skr. *dvāú*, *tottogo* 'twenty' = **tō-tugu* = Skr. *dvā́*, and Goth. *ahtáu* O.H.G. *ahto* = Skr. *aṣṭāú*. Kluge, in Paul-Braune's Beitr. VIII 506 ff., conjectures that a few Germanic substantival forms contain Idg. *-ō*, as A.S. (nom. acc. sing.) *nosu* 'nose' (gen. *nosa*), compare Paul's Grundr. I 334 and 609; this change from dual to singular, if correctly assumed, should be compared with the change of the Skr. dual forms *nā́s-ā rṓdas-ī* to fem. sing. Bartholomae would explain Goth. *bajōþ-s* 'both' as a dual derived from **bajō þō* 'both these' (Stud. zur idg. Sprachgesch., I 61).

Balto-Slavonic shows only Idg. **-ō*: Lith. *vilkù*, *gerů̃-ju* beside *gerù* (I § 664. 3 p. 523), O.C.Sl. *vlŭka*.

§ **286.** II. *ā*-stems had pr.Idg. **-ai̯*, **eḱu̯ai̯*. The formative suffix appears as *-a-*, which may be compared with that of the pronominal nom. sing. in *-ai̯* (§ 414), and the voc. sing. in *-a* (I § 318 p. 257, II § 59 p. 108). The case suffix is apparently the same as in the ending *-oi̯* of neuter *o*-stems (§ 293), and this cannot be separated from *-i* in the neuter **ḱm̥t-i* 'two tens' (§ 294). This *-i-* has become part of the stem in Avest. *dvaę-ibya* O.C.Sl. *dvě-ma*, Skr. *dváy-ōṣ* O.C.Sl. *dvoj-u* (see §§ 297 and 311).

Aryan. Skr. *áśvē*; Avest. *haęnē*. In Avestic there are a few scattered examples with *-a*, the masculine ending; see Bartholomae, Bezz. Beitr. IX 303. Skr. *aṣṭāú aṣṭā́* 'eight' is also used for the feminine, in all periods.

Greek. χῶραι, used for the nom. pl., seems to represent the Idg. dual, and to have been misunderstood and regarded as a plural owing to the ending -οι in the nom. pl. masculine; see the Author, Kuhn's Ztschr. XXVII 199 ff.[1]) But the dual forms Att. χώρᾱ, νύμφᾱ follow the analogy of the masc. in -ω; Homer has no duals in -ᾱ except those coming from masculine ᾱ-stems.

The Latin *equae*, *duae* (cp. Ved. *duvḗ*), like Gr. χῶραι, seem to represent the Idg. dual ending -*ai̯*; see the Author, *loc. cit.*

Old Irish *tuaith*, and beside it *dī* 'duae' = Skr. *dvḗ*, see I § 657. 4 p. 508. *dī*, instead of **dai* **dae*, has been assimilated to **tōtī* (cp. § 285 p. 192).

Germanic. A dubious survival of this formation is Goth. *tva þūsundja* 'two thousand', which is usually regarded as neut. pl. (on -*a* for pr. Goth. -*ai̯*, see § 263 Rem. pp. 165 f.). Compare Noreen on Norse Run. *þai-aʀ*, in Paul's Grundr. I 501 f.

Balto-Slavonic. Lith. *rankì*, *gerë-ji* beside *gerì*, see I § 664. 3 p. 523. O.C.Sl. *rącě*, but *zmiji* (*zmija* 'snake') with *-*i̯ī* for *-*i̯ei̯*, earlier *-*i̯oi̯*, Idg. *-*i̯ai̯*, see I § 100 p. 95.

§ **287.** III. *ī*- *i̯ē*-stems (cp. footnote 1 on page 68) probably had pr. Idg. -*ī*, **bhr̥ĝhn̥t-ī*, which may be explained like -*ai̯* in *ā*-stems, and derived from -*ī-i*.

This may be legitimately regarded as the ground-form of Skr. *bṛhat-ī́*, Avest. Gāthic *barent-ī*, O.Ir. *inis*, Lith. *žemì* (I § 664. 3 p. 523).

In Vedic Sanskrit these forms were assimilated to *ī*- *i̯i̯*-stems (§ 291), whence *bṛhatyāù*, the only form used in the later language (cp. nom. pl. *bṛhatyàs* § 316).

1) Something just like this has happened in Polish. When the dual number fell out of use, the loc. dual *ręku* 'in both hands' (§ 311) was regarded as loc. sing. masc. by mistake, so that there arose phrases like *w mojim ręku* 'in my hand'. See Baudouin de Courtenay, Kuhn-Schleicher's Beitr. VI 77, 81.

Gr. *φερούσᾱ* follows the *i̯ā*-stems (§ 286). So also O.C.Sl. *zemlji* (§ 286), but *zemlji* may be a transformation of **zemī* with Idg. *-ī*, cp. nom. sing. *vezą̄šti* instead of **vezą̄ti* § 191 p. 68.

§ **288.** IV. *i*- and *u*-stems had pr. Idg. *-ī* and *-ū*, **ou̯ī* and **sūnū*. If Idg. *-ōu̯* is an extension of *-ō* (§ 285 Rem. p. 191), it is natural to assume that this *-ō* and the above *-ī -ū* were related in the same way as the corresponding endings of the instr. sing.; cp. § 274 pp. 174 f., Osthoff, Morph. Unt. II 132 ff., and J. Schmidt, Kuhn's Zeitschr. XXVII 291 f.

Skr. *ávī*, Avest. *aži*. O.Ir. *fāith* for **u̯ātī*. Lith. *naktì* (I § 664. 3 p. 523), O.C.Sl. *nošti*.

Skr. *sūnū́*, Avest. *bāzu*, beside *bāzv-a* which follows the consonant stems (§ 289). O.Ir. *bith*. Lith. *sū́nu* for **sūnū* (I § 664. 3 p. 523), O.C.Sl. *syny*.

In Greek nothing is to be found but re-formations which follow the consonant stems (§ 289). *i*-stems: Att. inscr. *ἀλύσει* with *-ει* for **-ε(ι̯)-ε*, MSS. *πόλει* and *πόλεε* (*πόλῐ-ς*), the latter of which should be compared with *πόλεος*, which apparently remained uncontracted (§ 231 p. 120). *u*-stems: Hom. *πήχε(ϝ)-ε ταχέ(ϝ)-ε*, Att. inscr. *υἱεῖ*.

§ **289.** V. All other stems had pr. Idg. *-e* preceded by the strong stem, as **pətér-e* = Gr. *πατέρ-ε*. This type remained in Greek and Irish, and there are a few questionable traces of it in Sanskrit, Germanic, and Lithuanian.

Remark 1. In the Vedas, instead of *-ā*, which must be assumed for the Idg. ending of *o*-stems, we often meet with the shortened termination *-a*; and *mātara-pitarāu* (instead of *mātarā-pitarāu*) is cited from later Sanskrit. See Benfey, Sāmavēda p. LXIII; Abhandl. der Gött. Ges. der Wiss., XIX 142 ff.; Mahlow, Die l. Voc. 130; Lanman, Nom.-Infl. p. 342. It is quite possible (cp. Osthoff Morph. Unt. I 226 f.) that this *-a* was the *-a* = Gr. *-ε* which belonged originally to consonant stems only; that it was kept in certain instances, and was then, by a mistake, extended to other stems; and in particular, by a reminiscence of the vocative singular in *-a*, was used for the vocative; e. g. R.-V. I 151 4 *asura*. I have no belief in the view held by Meringer (Kuhn's Ztschr. XXVIII 233) that

there was an Idg. dual voc. in *-o = Skr. -a; Meringer would even call Gr. δύο an example of this! But compare what he says on pp. 230 f.

A dual form *kunūn-e is conjecturally restored by E. Brate as the origin of Old Swedish *kunu* 'two women' (Bezz. Beitr. XIII 42 f.).

J. Schmidt (Kuhn's Ztschr. XXVI 360) believes that he has found this suffix -e in Lithuanian dialectic participial forms such as *isz-gĕruse* instead of *isz-gĕrusiu* (*ìsz-geriu* 'I drink up'). But in my opinion it is quite possible, in spite of Schmidt's assurance to the contrary, that here -*iu* has become -*e* regularly.

In Sanskrit, -*āu*, -*ā*, the ending of *o*-stems, was borrowed in the prehistoric period by consonant stems, just as the instr. sing. -*ā* spread from *o*-stems to consonant stems (§ 280 p. 184). It is impossible to make out whether the Iranian endings of consonant stems, Avest. -*ă* O.Pers. -*ā*, represent pr. Iran. *-*ā* = Skr. -*ā*, or pr. Iran. *-*a* = Gr. -ε — whether, for example, Avest. *nar-a* = Skr. *nár-ā* or Gr. ἀνέρ-ε. If the former, the ending of *o*-stems became universal in the proethnic stage of Aryan. The same doubt meets us in considering the endings of the instr. sing. Avest. -*ă* O.Pers. -*ā* § 280 p. 184.

§ **290.** 1. *n*-stems. Pr. Idg. *$\hat{k}$(*u*)*u̯on-e*. Gr. κύν-ε instead of *κυον-ε *πον-ε, and similarly κύν-α κύν-ες have adopted the weak stem; τέκτον-ε, ποιμέν-ε, ἀγῶν-ε. Mid.Ir. *coin*, *ārain*. — Skr. *śván-āu* -*ā*, Avest. *spān-a*. Lith. *szun-iù ãkmen-iu* following the *i̯o*-stems, O.C.Sl. *kamen-i* following the *i*-stems.

2. *r*-stems. Pr. Idg. **mātér-e*, **dŏtor-e*. Gr. μητέρ-ε, δώτορ-ε; ἄνδρ-ε (Hom. has also ἀνέρ-ε) like ἄνδρ-α § 218 pp. 94 f., δοτῆρ-ε following δοτήρ. Mid.Ir. *māthir*, Mid.Ir. *siair* (cp. II § 120 p. 379). — Skr. *mātár-āu* -*ā*, *dātār-āu* -*ā*; Avest. *mātar-a* and by re-formation *māθr-a*, *dātār-a*. Lith. *móter-i* O.C.Sl. *mater-i* follow the *i*-stems.

3. Stems ending in explosives. Pr. Idg. **bhr̥ĝhont-e*. Gr. φέροντ-ε, O.Ir. *carit*. — Skr. *bṛhánt-āu* -*ā*, Avest. *ber^{e}zant-a*. Lith. *vẽžancziu*(-*du*) O.C.Sl. *vezǫšta* following the *i̯o*-flexion.

Gr. φυγάδ-ε, μείρακ-ε. O.Ir. *druid* 'Druids' *rīg* 'kings'.

4. *s*-stems.

Pr. Idg. **dus-menes-e*. Gr. δυσμενεῖ, to be explained in the same way as τῷ σκέλει (§ 294). — Skr. *durmanas-āu* -*ā*, Avest. *dušmanaŋh-a*.

Pr. Idg. compar. *ōk̑(i)i̯os-e, modified by analogy in all languages. Skr. áśīyā̆s-āu -ā like the acc. áśīyā̆s-am (§ 220 p. 97), Avest. āsyaṅh-a instead of *āsyåṅh-a, cp. acc. sing. āsyåṅh-em (loc. cit.). O.C.Sl. slaždīža, declined as a i̯o-stem. Gr. ἡδίον-ε with the formative suffix -i̯en-.

Pr. Idg. part. perf. act. *u̯ei̯du̯os-e, modified by analogy in all languages. Skr. vidvā̆s-āu -ā like acc. sing. vidvā̆s-am (§ 220 pp. 97 f.). Lith. mìrusiu(-du) O.C.Sl. mĭrŭša, declined as i̯o-stems. Gr. εἰδότ-ε with the formative suffix -u̯et-.

§ **291.** 5. Stems in -ī -ii̯, -ū -uu̯, and certain Root Nouns.

Gr. κί-ε, ὀφρύ-ε σύ-ε; Skr. dhíy-āu -ā, bhrúv-āu -ā.

Gr. νῆε (inferred, but not actually found) for *νᾱϝ-ε; Skr. nā́v-āu -ā. Pr. Idg. *gou̯-e : Gr. βό-ε; Skr. gā́v-āu -ā; O.Ir. boin following coin (§ 290 p. 196), cp. § 221 pp. 98.

Nominative and Accusative Dual Neuter.[1])

§ **292.** o-stems had -oi̯, and doubtless -ei̯ also; consonant stems had -i or -ī, and i-stems had -ī. It is a doubtful point whether or no -ĭ was the original suffix for all stems; see § 294.

Consonant stems which admitted of vowel gradation had always a weak grade of stem.

§ **293.** 1. o-stems. Pr. Idg. -oi̯ and doubtless -éi̯ also; for the difference between these cp. § 240 p. 133.

Skr. yugé, dvé; Avest. xšaþrē from nom. acc. sing. xšaþre-m 'lordship, realm'. Skr. aṣṭāú aṣṭā́ may always be neuter.

The Greek ϝει- 'two', in ϝεί-κατι εἴ-κοσι 'two tens', is probably the dual of a stem *u̯o-; according to a guess of Thurneysen's, we should recognise the same *u̯ei̯ in the u- of O.Cymr. u-ceint (Kuhn's Zeitschr. XXVI 310). I add another guess, that δύο (beside δύω) is the old neuter, and is the form assumed by *δυοι̯ when the next word began with a sonant;

1) References are given in the footnote on page 189.

perhaps Lac. δύε comes from *δυεᵢ̯ in the same way, cp. Att. δυεῖν, which seems to point to *δυει-ιν (§ 312). Cp. the Author, Gr. Gr.[2] p. 79 footnote 1, p. 124; Morph. Unt. V 23 ff. Similarly we find Boeot. ὀκτό beside ὀκτώ in the other Greek dialects. Elsewhere in Greek the masc. ending -ω has taken the place of the neuter, as τὼ ζυγώ like τὼ ἵππω.

Lat. *vī-gintī* may contain in both parts the neuter ending *-eᵢ̯ or *-oᵢ̯. See the Author, Morph. Unt. V 22 f., 24, and below, § 294 of this volume. The masc. forms *duo ambō octō*, like Gr. δύω, are used for the neuter as well as masculine.

There seems to be no trace left in Irish of this formation. *dā*, the masc. form, is used with neuter substantives; but when so used *-n* is added, as *dā n-gruad* 'duae genae', which can hardly be due to any cause except the analogy of the nom. acc. sing. neuter (cp. Windisch, Paul-Braune's Beitr. IV 223). *dliged* is probably a singular form used as dual, see § 285 p. 193 (sing. *dliged n-* 'law').

Germanic examples are doubtless to be recognised in the following neuter words: O.Sax. *twē* A.S. *twā* = O.C.Sl. *dvě* Idg. **duoᵢ̯*, while Goth. *tva*, as well as masc. *tváí* and fem. *tvōs*, is plural in form. But it is possible to regard *tváí* as the neuter form, turned into a masculine by association with *þái* etc.

O.C.Sl. *izě* = Idg. **jugoᵢ̯*, from *igo* 'iugum' (I § 84 pp. 81 f.). Also *polji* (from *polje* 'field') for *-*eᵢ̯*, earlier *-*oᵢ̯* (I § 84 pp. 80 and 82).

§ **294.** 2. Consonant stems. The case-suffix *-i* with the weak stem is found in Idg. **k̑m̥t-i* 'two tens' (§ 176 pp. 29 f.): Gr. *ϝεί-κατι*, Armen. *k̔san* for **gĭ-santi* just as *beren* 'they carry' = Skr. *bháranti* (§ 177 p. 34), Avest. *vīsaiti*, but Skr. *viṣáti-ṣ*, which arose as follows: **viṣati* became indeclinable, and was then attracted by the analogy of *ṣaṣṭí-ṣ* '60' etc., and became fem. sing.

Elsewhere the Sanskrit consonantal and *u*-stems regularly show not *-i* but *-ī*, as *dhā́mn-ī dhā́man-ī*, *bṛhat-ī́*, *mánas-ī áśīyas-ī vidúṣ-ī*, *mádhv-ī* (*mádhun-ī*, see § 393). Now Old

Church Slavonic has *-i* (side by side with the commoner *-ě*), as *imen-i sloves-i*. Putting this and that together, we may allow ourselves to believe that *-ī* as well as *-i* was used for a suffix of the nom. acc. dual neuter in the parent language. If so, it is not necessary to derive the final *-ī* of *vīgintī* from *-eu̯* or *-ou̯* (see § 293, last page). But can *-ī* in Skr. and O.C.Sl. have been borrowed from the case-system of *i*-stems? (see § 295).

The Avesta seems to give us but one form, *vīsaiti*, which belongs to this class.

Just so in Greek the only trace of the formation is *ϝί-κατι*. In all other instances, *-ε* has been borrowed from masc. and fem. nouns, just as neuter *o*-stems borrowed *-ω* from the masculine (§ 293 p. 198). Att. inscr. *σκέλει* for **σκελε(σ)-ε*; MS. forms in *-εε*, as *γένεε*, found in Attic writers, are a re-formation following those words in which *-ε* has not been contracted. Compare the adoption of *ε* by the neuter *ὄσσε* § 295. *γένη* in phrases like *γένη δύο* is the plural, as is *ἄστη* in *ἄστη δύο* (§ 295).

Irish. *ainm* and *tech*, like *dliged* (§ 293), are probably singular forms used for the dual; see § 285 p. 193.

Remark. J. Schmidt, Pluralb. 52, would apparently derive *ainm* from **an-mn-ī*; against which there is a great deal to be said. Nor should we admit Stokes's derivation from a pr. Kelt. **an-men-e* (Bezz. Beitr. XI 166).

Old Church Slavonic *-ě*, borrowed from *o*-stems (§ 293, last page): *imen-ě*, *sloves-ě*. Also *-i*, whose origin has just been discussed.

§ **295.** 3. *i*- and *u*-stems.

In *i*-stems the proethnic Idg. termination was *-ī*. Skr. *akṣī́* Avest. *aši* 'the eyes', *śúcī* from stem *śúci-* 'pure, clean'. O.C.Sl. *oči* (*oko* 'eye') and *uši* (*ucho* 'ear'); Lith. *akì ausì*, which have become feminine. If there was an Idg. **u̯ī-ḱm̥ti* 'twenty', **u̯ī* was nom. acc. dual neut. of the stem **u̯i-* (§ 177 p. 33). Re-formates: Skr. *śucin-ī* (§ 393) and Gr. *ὄσσε* 'the eyes' for **ὀκ̯-ε* (other cases are *ὄσσων ὄσσοισι*, with plural endings).

This Idg. *-ī* was doubtless a contraction of the stem-final *-i-* with the case-ending *-i* (or *-ī*).

Ved. *mádhv-ī* is either (1) the regular descendant of the Idg. ground-form, or (2) **madhv-i* re-formed, *-i* having been replaced by the ending of *i*-stems; cp. § 294. Gr. *ἄστη* in phrases like *ἄστη δύο* is really plural, cp. *γένη* § 294.

Dative, Ablative, and Instrumental Dual.[1])

§ **296.** The different languages have such diverse modes of formation that it is impossible to restore the Indo-Germanic flexion with any certainty. Compare § 283, page 189. Skr. *-bhyām*, and *-bhiyām* very rarely in the Vedas. The Avesta has one example of *-byąm*, in the word *brvađ-byąm* from the stem *brvat-* 'eyebrow', elsewhere *-bya*, Gāthic *-byā*, with the variant *-wę* (the difference is merely phonetic, and quite regular see I § 125 p. 115, § 481 p. 355). O.Ir. gives *dib n-* (from *dā* 'duo'), for **d(u̯)o-bĭn*, for whose suffix more than one ground-form is possible, for instance **-bhēm* or **-bhēn*. O.C.Sl. *-ma*, the *-a* of which (= pr. Slav. *-ā*) must represent Idg. *-ō* or *-ā*, and may have lost a final *-s*. Lith. *-m*, after which something must have dropped; if the last syllable is accented, the form has the incisive accent when it is dative, and the gliding accent when instrumental (I § 691 pp. 558 ff., and II § 90 p. 274 with the footnote); e. g. *abĕ̃m vìlkám* 'to both wolves', but *sù abẽ̃m vìlkam̃* 'with both wolves', dat. *naktìm* instr. *naktim̃*. This variation of accent — given by Kurschat, though nothing definite is known as to how widely it is recognised in the Lithuanian dialects — has come in through association of these forms with the corresponding plural cases (e. g. dat. *naktìms* instr. *naktim̃s*); and in the same way other dual forms have been assimilated to the plural in this language.

The affix **em* may have become attached to Skr. *-bhyām* Avest. *-byąm* and O.Ir. *-b n-*, cp. Skr. *tú-bhyam* beside *tú-bhya*

1) References are given in the footnote on p. 189.

Avest. Gāth. *taibya* 'tibi', and the like, § 186 p. 62. The agreement of Aryan with Keltic in having *bh-* seems to make it certain that initial *bh-* is older than the Balto-Slav. initial *m-* (cp. § 274 pp. 175 f.). But be it observed that the *-m* of Goth. *tvái-m* O.H.G. *zwei-m* may possibly represent the old dual suffix (although there can be no mistake about the plural suffix in O.Icel. *tvei-mr*), and perhaps **vi-m*, implied in Skr. *vi̯-śatí-* '20', is another dual case belonging to this class, so that we should have to compare O.H.G. *zwein-zug*, with a crystallised dative dual for its first part (§ 177 p. 35).

-b n- seems to have disappeared from Irish, except in *dib n-*; elsewhere we find *-b*, as in the plural (§ 380), cp. *in dib n-uarib deac* 'duodecim horis' instead of **uarib n-deac*. The reason why *-b n-* gave place to *-b* is that some of the dual endings had been worn down into the same sounds as the plural (Windisch, Paul-Braune's Beitr. IV 225 f.). Compare § 297.

For the Greek endings *-οιν -οιν -αιν* etc. see § 312.

§ **297.** 1. *o*-stems. Skr. *vṛ́kā-bhyām*, *yugā́-bhyām*, *dvā́-bhyām*, pronom. *tā́-bhyām*; Avest. *vehrkaę-ibya vehrkaę-wę*, *dvaę-ibya*: no pronominal forms found. O.Ir. *feraib* may be derived from pr. Kelt. **u̯iro-bhĭn*, cp. § 296; *dib n-* (once written *deib*) for **du̯o-bĭn*, with *i* in the first syllable because of the word's being proclitic. Lith. dat. *vilká-m* instr. *vilka-m̃*, O.C.Sl. *vlŭko-ma igo-ma* (on *zŭlo-dějĭ-ma* see § 368), but Lith. dat. *dvẽ-m* instr. *dvẽ-m* dat. *tẽ-m(-dvëm)* instr. *tẽ-m(-dvëm)*, O.C.Sl. *dvě-ma tě-ma*.

The stem-final *-oi̯-* or *-ei̯-* is certainly original here in the numeral 'two' and in pronouns, as it is in the gen. loc. dual, e. g. Skr. *dváy-ōṣ táy-ōṣ* O.C.Sl. *dvoj-u toj-u* (§ 311). I conjecture that it was also used in the dat. abl. instr. of substantives — we actually find it in Avest. *vehrkaę-ibya* — and that this stem in *-oi̯ -ei̯* was the ending of the acc. dual neuter of the word, which similarly belonged to both nouns and pronouns originally. Cp. e. g. O.C.Sl. *dvě-ma* : *dvě* (§ 293 pp. 197 f.), and Skr. *akṣī́-bhyām* O.C.Sl. *oči-ma* beside *akṣī́*

oči (§ 300). In Sanskrit the diphthong *(*vṛkē-bhyām)* was exchanged for the ending of the nom. acc. masc., *vṛ́kā* = Gr. *λύκω* (cp. Bartholomae, Kuhn's Ztschr. XXIX 582 and Bezz. Beitr. XV 38, where Avest. *nåṇhā-bya* is taken to be another such form); in the European languages the dual was influenced by the corresponding cases of the plural: O.Ir. *feraib* like dat. pl. *feraib* for **u̯iro-bis* (cp. § 296 p. 201, § 380), Lith. *vilká-m* like dat. pl. *vilká-ms*, O.C.Sl. *vlŭko-ma* like dat. pl. *vlŭko-mŭ*.

Remark 1. Meringer's assumption that this dual form ended in Idg. '*u-(bhyām?)*' or '*ou-(bhyām?)*' I hold to be unfounded (Meringer, Zeitschr. für d. österr. Gymn., 1889, p. 1017). The forms of the dual cases, as I have already insisted in § 285 Rem., page 192, need not all be of the same kind.

Remark 2. The way in which the form of the nom. acc. dual becomes a base for the other dual cases is well illustrated by what happens in the Lithuanian dialects, as described by Brückner, Archiv für slav. Phil., III 308 f.

§ **298.** 2. *ā*-stems. *-ā-* was the stem-final in pr. Idg. Skr. *áśvā-bhyām dvá-bhyām*, pron. *tá-bhyām*. O.Ir. *tuathaib*, and, with the length of the stem-final kept, *mnāib* from *ben*, gen. *mnā*, 'woman' (cp. § 296 p. 201, § 381). Lith. *raňko-m* (dat. *mergó-m* instr. *mergõ-m* from *mergà* 'girl'), pron. dat. *tó-m(-dvëm)* instr. *tõ-m(-dvëm)*, O.C.Sl. *rąka-ma*.

Is it possible that the numeral *two* originally had no special feminine form in *-ā-*? O.Ir. *dib n-*, Lith. *dvĕ-m dvẽ-m*, O.C.Sl. *dvĕ-ma* are both masc. and fem., and so are the gen. loc. O.C.Sl. *dvoj-u* Skr. *dváy-ōš* (cp. too Lith. *dvẽjū* used for the feminine). Compare § 311 p. 209. Skr. *dvá-bhyām* would in that case be an Aryan re-formate. The fem. use of O.C.Sl. *tĕ-ma* may be a consequence of that of the pl. *tĕ-mŭ tĕ-mi*, and of the fact that *toju*, gen. loc. du., could be used from early times to express all genders (§§ 310 and 311).

§ **299.** 3. *ī-* *i̯ē*-stems (cp. p. 68, footnote 1). *-ī-* was the pr. Idg. stem-final. Skr. *bṛhatī-bhyām*, Avest. *barenti-bhya* (*i* = *ī*). O.Ir. *insi-b* (cp. § 296 p. 201, § 382).

In Balto-Slavonic we find *-i̯ē-* instead of *-ī-* (cp. dat. instr. pl. §§ 370, 382): Lith. *žẽmė-m* (dat. *katė-m* instr. *katė̃-m*

from *katĕ* 'cat'), O.C.Sl. *zemlja-ma*. Following stems in *-i̯ā-*: Lith. dat. *vežanczió-m(-dvëm)* instr. *vežancziõ-m(-dvëm)*, O.C.Sl. *vezą̨šta-ma*.

§ **300.** 4. *i*-stems. Skr. *ávi-bhyām*, Skr. *aźi-bya*. O.Ir. *fāithi-b* (cp. § 296 p. 201, § 383). Lith. dat. *naktì-m* instr. *nakti-m̃*, O.C.Sl. *noštĭ-ma*.

With neuter *i*-stems it would appear that as far back as pr. Idg. the form of the nom. acc. dual in *-ī* was used for the stem in this form: Skr. *akṣī́-bhyām* O.C.Sl. *oči-ma* beside *akṣī́ oči* 'the two eyes', and so also O.C.Sl. *uši-ma* from *uši* 'the two ears' (cp. Osthoff, Morph. Unt. II 132 f.; J. Schmidt, Kuhn's Zeitschr. XXVI 17). Of *o*-stems, O.C.Sl. *dvč-ma*, for example, bears the same relation to *dvĕ*; see § 297 p. 201.

§ **301.** 5. *u*-stems. Skr. *sūnú-bhyām*, Avest. *bāzu-bya*. Lith. dat. *sūnù-m* instr. *sūnu-m̃*, O.C.Sl. *synŭ-ma*.

O.Ir. *bethaib* like instr. pl. *bethaib* (cp. § 296 p. 201, § 383).

§ **302.** 6. Stems ending in *-n* and *-r*.

The stem was weak in pr. Idg., as it was in the same cases of the plural (§§ 373, 374, 384, 385). It remains weak in Skr. *śvá-bhyām tákṣa-bhyām*, *mātṛ́-bhyām dátṛ-bhyām*, Avest. *ner*^{e}*-bya* (nom. *nar-a* = Gr. *ἀνέρ-ε*).

In Irish and Balto-Slavonic, these cases of the dual, like the same cases in the plural, have taken the forms of the vowel-declensions (§§ 356. 2 and 402). O.Ir. *conaib fiadnaib*, *māthr-ib* (cp. § 296 p. 201, §§ 384 and 385). Lith. dat. *szun-ì-m akmen-ì-m moter-ì-m* instr. *szun-i-m̃ akmen-i-mĩ moter-i-m̃*; O.C.Sl. *kamen-ĭ-ma mater-ĭ-ma*.

§ **303.** 7. Stems ending in an Explosive. These had the weak stem in pr. Idg., as also in the corresponding plural cases (§§ 367. 2 and 379. 2). Skr. *bṛhád-bhyām*, Avest. *ber*^{e}*zad̄-bya ber*^{e}*zaþ-bya* and (with a change to the strong stem) *ber*^{e}*zan-bya*; for the stem-final see the sections just cited, and § 356. 2. Avest. *brvad̄-byąm*, as has been said already (§ 296), is the only form with *-byąm* in the Avesta.

O.Ir. *cairt-ib* and O.C.Sl. *telęt-ĭ-ma* (from *telę* n. 'calf', cp. § 225 p. 107, § 244 pp. 142 f.), may be understood by referring to § 302.

§ **304.** 8. Stems in *-s*.

Aryan. Skr. *mánō-bhyām* should regularly be **manad-bhyām*, but it has been influenced by the nom. acc. sing. *mánō* ('mind, thought'), like the pl. *mánō-bhiṣ*; see § 356. 2. Hence *durmanō-bhyām* and the compar. *áśīyō-bhyām* from nom. sing. masc. *dur-manās áśīyān* neut. *dur-manō áśīyō*. Similarly, *havír-bhyām cákṣur-bhyām* have been affected by the nom. acc. sing. *havír* (*havíṣ*) 'libation' *cákṣur* (*cákṣuṣ*) 'eye', and have *-rbh-* instead of the strictly regular *-ḍbh-* (I § 591 p. 448). But the regular *-d-* is found in the part. perf. act. *vidvád-bhyām* like *vidvád-bhiṣ*, only in these the formative suffix is strong, and the weak *-us-* is gone, see I § 591 p. 448, II § 136 pp. 440 f.). Other regular forms are Avest. *snaiþiž-bya* from *snaiþiš* n. 'sword', and the part. perf. act. *vīđūž-bya* to be inferred from *vīđūž-biš*. No form from any *es*-stem is found; but reasoning from the pl. *manē-biš*, which is built up on the form of the nom. acc. sing. neut. in *-ē* (in the Gāthās *manē*), we may venture to restore **manē-bya *āsyē-bya* (see §§ 376, 387).

O.Ir. *tigib* (*tech* n. 'house' for **(s)tegos*) perhaps for **teges-o-bi-*, cp. instr. pl. § 387.

Balto-Slavonic again shows a change to the *i*-flexion (cp. §§ 302, 303): Lith. dat. *debes-ì-m* instr. *debes-i-mìs* (nom. sing. *debes-ì-s* 'cloud', II § 132 p. 422), O.C.Sl. *sloves-ĭ-ma*.

§ **305.** 9. *ī- i̯i-*, *ū- u̯u̯*-stems and Root Nouns in *-u̯*.

Skr. *dhī-bhyám bhrū-bhyám* (similarly *pūr-bhyám gīr-bhyám*, see II § 160. 4 pp. 485 f.). In Old Church Slavonic the corresponding form of *svekry* and the like is not recorded.

Skr. *nāu-bhyám, gó-bhyám*.

Genitive and Locative Dual.[1])

§ **306.** With these cases as with the others, it is difficult to make out what forms the parent language had. It is probable that the two cases were not expressed by one form, but that they were regularly distinguished.

First of all will be given the facts gathered from each branch of the parent speech; this will be followed in § 311 by an examination of the previous history of the recorded forms, as far as it can be made out. Lastly, in § 312 the Greek forms for the genitive, locative, and other cases of the dual will be described.

§ **307.** Sanskrit. Both cases have the same ending, *-ōṣ̌* = pr. Ar. **-aṷš.*

Stems in *-o-* and *-ā-* end in *-ayōṣ̌*, e. g. *vṛ́kayōṣ̌* from *vṛ́ka-s* 'wolf', *yugáyōṣ̌* from *yugá-m* 'yoke', *áśvayōṣ̌* from *áśvā* 'mare'. Side by side with this formation are Ved. *ēnōṣ̌* (also *ēnayōṣ̌*) from *ēna-* 'he' and *avṓṣ̌* from *avá-* 'this', as in O.C.Sl. *vlŭku* from *vlŭko-* (§ 310).

Remark. No trustworthy evidence for the shorter formation is to be got from Ved. *yṓṣ̌* beside *yáyōṣ̌* from *yá-* 'qui', *niṇiyṓṣ̌* from *niṇiyá-* 'inside, hidden', *pastíyōṣ̌* from *pastíya-* n. 'habitation, lodging', *pāṣ̌íyōṣ̌* from *pāṣ̌íya-* n. 'pressing-stone'. In all these *-ay-* may have dropped out by syllabic dissimilation (I § 643 p. 482), as *-āy-* seems to have done in *suvapatyāí* § 247 p. 147.

ī- *i̯ē*-stems: *bṛhaty-ṓṣ̌.*

i- and *u*-stems: *ávy-ōṣ̌*, *sūnv-ṓṣ̌.*

Consonant stems (with the weak form of the stem): *śún-ōṣ̌* (for the accent see p. 70 footnote 2), *rā́jñ-ōṣ̌* from *rā́jan-* 'king', *mātr-ṓṣ̌ dā́tr-ōṣ̌*, *bṛhat-ṓṣ̌*, *mánas-ōṣ̌ áśīyas-ōṣ̌ vidúṣ-ōṣ̌.*

dhiy-ṓṣ̌ bhruv-ṓṣ̌, *nāv-ṓṣ̌*, *gáv-ōṣ̌* (cp. gen. sing. Ved. *gáv-as* § 231 p. 120).

§ **308.** Iranian.

In the Avesta, the genitive dual ends in *-å -ås(-ca)* = pr. Ar. **-ās*, the loc. dual in *-ō*, which may be derived

1) For references on this subject, see the footnote on page 189.

regularly from either pr. Ar. *-*as* or pr. Ar. *-*au̯* (cp. Bartholomae in Bezz. Beitr. IX 208, 312 f., XIII 83).

Stems in *-o-* and *-ā-* have gen. *-ayå*, as in Sanskrit both stems have *-ayōš* (§ 307): *vehrkayå* from *vehrka-* m. 'wolf', *haęnayå* from *haęnā-* f. 'hostile host', and similarly in pronouns *yayå* from *ya-*, *aętayå* from *aęta-*, *ayå* from *a-*. This case is found without the syllable *-ay-* in Dvandva phrases, e. g. *fratīrå baęšatastīrå* 'of F. and B.', a pair of brothers (stem *fratīra-* and *baęšatastīra-*); *fratīrå* : *vehrkayå* = Skr. *ēnōš* : *ēnayōš*. Of the locative ending *-ayō*, examples are only found with *o*-stems: *vehrkayō, ubayō* from *uba* 'both'.

u-stems: gen. *bāzv-å* loc. *bāzv-ō*.

n- and *r*-stems: gen. *sūn-å*, *nar-å*; the strong stem of *nar-å* is not original.

nt-stems: gen. *ber^e^zant-å*, with non-original strong stem.

tāt-stems: gen. *amar^e^tāt-å* from *amar^e^t[a-t]āt-* (I § 643 p. 482) 'genius of immortality'. *ĝ*-stem: *hvar^e^z-å* from *hvar^e^z-* i. e. *hu-var^e^z-* 'doing good'.

Old Persian. Spiegel and Osthoff regard *dastayā* (from *dasta-* 'hand') and *duvarayā* (from *duvara-* 'door, gate, court') as loc. dual. They may of course be regarded, if we please, as loc. sing. with the postposition *ā*, *dastay-ā* = Avest. *zastay-a* (§ 263 p. 164); this notwithstanding Osthoff's objections set forth in Morph. Unt. II 100 f.

§ **309.** In Irish the genitive dual has a special form. Several classes of stems furnish no examples earlier than Middle Irish.

o-stems: *dā* ('duorum'), *fer*, *cēle*. *ā*-stems: *tuath*, *ban*. *i*-stems: *fātho fātha*. *u*-stems: *betho -a*. *n*-stems: *con*, *āran*. *r*-stems: *māthar*. *nt*-stems: *carat*. *es*-stems: *tige*. *bō* 'of two kine'.

The "aspiration" of the initial of a following word (I § 658. 1 pp. 510 f.) has no very strong support in Old Irish; in Middle Irish, the practice varies apparently without reason, and sounds are sometimes aspirated, sometimes left alone.

The original ending of the formation therefore still remains to be discovered. In some instances the gen. loc. dual seems to have been affected by the analogy of the genitive singular. Compare further Ascoli, Note Irlandesi p. 32.

§ **310.** Lithuanian dialects use a form in *-ms* with the meaning of a gen. dual, as *žodiu-ms sunu-ms dukterė-ms tů--du-ms* ('of both'), fem. *anë-dvi-ms* ('of those two'). See Geitler, Lit. Stud. 56, Beitr. zur lit. Dialektologie 38; and Brückner, Arch. für slav. Phil. III 309 f. With Brückner, we must regard the form as an extension of the dat. instr. in *-m* by the gen. sing. *-s*; compare these genitive forms built up on *mu-m ju-m*: — *muma juma* (the ending doubtless assimilated to *mana tava* = *mãno tãvo*) and O.Lith. *mumu jumu* (*-ū*, gen. pl.), cp. § 458.

Slavonic gives *-u* as the ending of gen. and loc.; this brings as back to **-oṵ* in the first instance; after it *-s* may have dropped (I § 185 p. 161, § 588. 7 p. 445). *o*-stems: *vlŭku*, but *dvoju toju*. *ā*-stems: *rąku*, but *dvoju toju*. *i*-stems: *pątĭju pątiju* (*-ĭj- -ij-* as in the gen. pl. *pątĭj-ĭ pąti-jĭ*, § 348). *u*-stems: *synov-u* (*-ov-* as in the gen. pl. *synov-ŭ*, § 349). *n*-stems: *kamen-u*. *t*-stems: *telęt-u*. *s*-stems: *sloves-u*.

§ **311.** We may now take a general view of the forms which have been given in the last four sections, for the purpose of comparison. At two points we are on firm ground: (1) Skr. *-ōṣ* : O.C.Sl. *-u*; and (2) the *i*-diphthong before the suffix in *o*-stems, as Skr. *táy-ōṣ*, Avest. *aętay-ā̊ ubay-ō*: O.C.Sl. *toj-u*.

1. The proethnic ending of the genitive dual may have been **-o-ṵ-s* or **-e-ṵ-s*, consisting of the ending of the *o*-stems, the *ṵ* of the nom. acc. masc. in *-ōṵ* (Idg. **dṵōṵ* = Skr. *dvāú*), and *-s*, the suffix of the genitive singular (§ 228 pp. 111 f.). The Avestic locative ending *-ō*, if derived from Idg. **-oṵ* or **-eṵ*[1]), would be the dual stem without any case-

1) It may be that this case is to be recognised in the Sanskrit word **durṓ-ṇas* 'within our (two) doors, at home with us', which is inferred from *durōṇá-* by Bartholomae Bezz. Beitr. XV 198 f.

suffix, to be compared with singular locatives like Skr. *kárman* Gr. *δόμεν* (§ 285 Rem. p. 191). Some form of this kind might be used to explain *-oϝ-* in the Greek *ὄγδο(ϝ)-ο-ς ὀγδο(ϝ)-ή-κοντα*, although there are other possible explanations of it (the Author, Morph. Unt. V 36 ff.).[1] O.C.Sl. *vlŭku* as a genitive may be derived from **-oṷs *-eṷs*, and as a locative from **-oṷ *-eṷ*. These proethnic endings spread beyond their own proper sphere in two directions: they passed (1) into the *ā*-class (O.C.Sl. *rąku*, certainly not containing Idg. **-aṷ*, cp. gen. pl. *rąkŭ* like *vlŭkŭ*); and (2) into the consonant, *i-*, and *u*-classes (Skr. *rā́jñ-ōš ávy-ōš* etc., O.C.Sl. *kamen-u pątĭj-u* etc.). The absence of *-s* final from the original form of O.C.Sl. loc. *rąku* is established, as Leskien points out to me, by Lith. *pusiaũ* 'half, in twain' (beside the subst. *pùsė* 'half'), cp. O.C.Sl. *mežďu* 'between', lit. 'within the bounds', loc. dual of *mežda* 'middle, boundary'.

Remark 1. Danielsson, starting from this assumed pr. Idg. **-oṷs (*-eṷs)*, has made an attempt to shew how certain nouns in Italic have been absorbed into the *u*-class (Pauli's Altital. Stud., III 187 ff.). He supposes that e. g. the gen. *cornūs* was originally a genitive dual from the stem *corno-* = Goth. *haúrna-*, and gen. *manūs* the same case of a stem *man- (man-ceps)*; it would then be possible to see original locatives of the dual in *cornū manū*. Similarly Kluge (Paul-Braune's Beitr. VIII 509) identifies the A.S. gen. sing. *nosa* (nom. *nosu* 'nose') with the Skr. gen. loc. dual *nas-ṓš*; if this were correct, **-oṷs* and not **-eṷs* must have been the original ending. These and other like conjectures and comparisons, ingenious though they be, are not to be trusted, as any one may see; the *u*-flexion of such stems can be always explained in other ways.

As regards Avest. *å* = pr. Ar. **-ās*, two questions offer themselves for consideration. (1) Was it properly the ending of *ā*-stems, which spread at some later period to those in *-o-*; (2) does its *ā*-vowel represent the Idg. *-ō* of the nom. acc. masc. of *o*-stems (Avest. *vehrka*)? Osthoff's conjecture (Morph.

1) This would offer a possible means of connecting *δεύτερος* directly with *δύω*, by deriving both from **δϝεν-*. All the same, I hold fast to my own explanation of the ordinal as by far the more probable (§ 166 p. 8).

Unt. II 93) that Avest. *-ayå* is a re-formation of **-ayaoš* on the analogy of the gen. sing. *haẹnayå* (§ 229 p. 114) I cannot accept. O.Pers. *-ay-ā*, locative in meaning, if indeed we are to allow the form at all (§ 308), is also obscure. It is quite possible to compare *-ayā* with the Avest. gen. *-ayå*.

2. The *i*-diphthong of Skr. *dváy-ōṣ táy-ōṣ* etc. is without doubt connected with that of Avest. *dvaẹ-ibya* Lith. *dvẽ-m dvẽ-m* O.C.Sl. *dvě-ma* (§ 297 p. 201). Not only these languages, but apparently Germanic and Baltic, have it in this same case; for there are certain forms which seem to have taken a plural case-ending instead of the dual, but to have kept the dual type in the stem to which the suffixes were attached. These forms are Goth. *tvaddjē* O.Icel. *tveggja* O.H.G. *zweijo* 'duorum' O.Icel. *beggja* 'amborum' (for the treatment of *-i̯-* between sonants in these Germanic forms see I § 142 p. 127), and Lith. *dvẽjū abẽjū* (cp. Skr. *ubháy-ōṣ* O.C.Sl. *oboj-u*); the Lith. words were doubtless previously **dvaj-ū *abaj-ū* or **dvej-ū *abej-ū*, which became *dvẽj-ū abẽj-ū* because influenced by the analogy of *dvě-m dvẽ-m*. This same original *i*-diphthong of the dual is doubtless to be traced in O.Sax. *twē-ne* from **du̯oi̯-no-* (cp. Meringer as cited, p. 235), in Gr. *δοιοί* from **du̯oi̯-i̯o-*, and in Skr. *dvē-dhā́* 'twofold, on two occasions'.

It is very probable indeed that the *i*-diphthong of the gen. loc. was used with *ā*-stems in the parent language itself; and it is therefore hard to make out whether these did not have *-ai̯-* (cp. nom. dual fem. **tai̯*), so that it would be necessary to derive e. g. the O.C.Sl. masc. *toju* from **toi̯ou̯(s)*, but the fem. *toju* from **tai̯ou̯(s)*, cp. Gr. *κόραιν* beside *ἵπποιν* (§ 312). It may also be asked whether Skr. *tay-* in the masculine may not represent Idg. **tei̯-* (cp. Att. *δυεῖν* and the rest, § 293 pp. 197 f.).

Remark 2. If Idg. *o* in open syllables became *ā* in pr. Ar. (I § 78 p. 69), the masc. Skr. **tāyōṣ*, not *táyōṣ*, would answer to O.C.Sl. *toju*. Then what would *táyōṣ* be: the feminine form, with Idg. **-ai̯-* (cp. § 422 Rem., on the instr. sing. Skr. *táyā* O.C.Sl. *tojǫ*) or a masc. form with

*-ei̯-? Compare Meringer, Zeitschr. für österr. Gymn. 1889, pp. 1017 f. Meringer's conjecture, that the stem *dṷi- in Skr. *dvi-pád-* etc. was once closely connected with the nom. dual fem. *dṷai̯ neut. *dṷoi̯ and with Skr. *dváṷ-ōš* etc., seems to me improbable, because the *i*-diphthong was most certainly not peculiar to the word *two*, nor can it be shewn that it first appeared in this word, and afterwards spread to all other stems. On *dṷi-, see § 166 p. 7, § 177 p. 33.

Keltic genitives such as *dā*, *fer*, *tuath* and so forth (§ 309 pp. 206 f.), remain obscure.

§ 312. Gen. Abl. Dat. Loc. Instr. Dual in Greek.

Hom. *-οιν*, Att. *-οιν* (contracted from *-οιν*), found in all stems but the *ā*-class, *ἵπποιν ἵπποιν* from *ἵππο-*, *ποδοῖιν ποδοῖν* from *ποδ-* etc. A variant found on Attic inscriptions is *-οι*, for *-*οιι*, as *θανόντοι*, and similarly in inscr. from Argos, as *τοῖ ϝανάκοι*. Elean *-οιοις*, *δυοίοις*, *αὐτοίοιρ* (for this *-ρ* see I § 653 p. 500). Attic *ā*-stems have *-αιν*, *κόραιν*.

Attempts to explain the suffixes have been made by Fick, Bezz. Beitr. I 67 f.; J. Baunack, Mém. de la Soc. de ling., V 25 ff., Die Inschrift von Gortyn 70 f., Stud. auf dem Gebiete des Gr. und der ar. Sprachen, I 174 f.; Thurneysen, Kuhn's Zeitschr. XXVII 177; Torp, Zur Lehre von den geschlechtl. Pron. 47 f.; and the Author in his Greek Grammar, ed. 2, p. 124.

No doubt the relation of *ἵπποι-ιν ἵπποιν* to *νῶ-ιν σφῶ-ιν, νῷν σφῷν* (nom. *νώ σφώ*) is the same as that of Avest. *vehrkaṇ-ibya* to Skr. *vṛ́kā-bhyām*. Then we have in Greek the same diphthong (*-ei̯-* beside *-oi̯-* is seen in Att. *δυεῖν*) as we saw in the dat. abl. instr. and gen. loc. of the other languages, which we regarded as identical with the ending of the nom. acc. neuter (§§ 297 and 311). If the fem. Skr. *táyōš* O.C.Sl. *toju* comes from Idg. *tai̯-oṷs (§ 311, last page), *κόραιν* for **κοραι-ιν* would be parallel to it. In considering these comparisons, it should be borne in mind that apparently forms are found in Greek which retain the endings *-οι* (*-ει*) and *-αι*, for the nom. acc. neuter of *o*-stems and the nom. acc. of *ā*-stems; see § 286 p. 194 and § 293 pp. 197 f.

Elean *-οι-οις* is without doubt a late re-formation following the dative plural, which in this dialect has *-οις* in place of *-σι*, as *ἀγών-οιρ* (§§ 360, 361). The change perhaps belongs to a time when *-οι* had become *-οι*, so as to cause confusion between this case and the loc.-dat. singular in *-οι* (§ 263 pp. 164 f.). Similarly the Polish loc. dual *dwu* 'duobus' *obu* 'ambobus' were changed into *dwuch obuch* by adding the *-ch* of the loc. plural, *trzech* 'tribus' etc. (Baudouin de Courtenay, Kuhn-Schleicher's Beitr. VI 79 f.).

The doublets *-οι-ιν* and **-οι-ι* recal Lesb. *ἄμμ-ιν ὔμμ-ιν* and *ἄμμ-ι ὔμμ-ι* (compare too Gort. *ὄ-τιμι*), also *σ-φίν* and *σ-φί*, *τοῖ-σιν* and *τοῖ-σι*. But how are we to proceed? Does *-ιν -ι* represent a pr. Idg. dual case-ending, say **-u̯i(m)*, which Greek alone retained; or is it a special Greek formation? This question has not yet been answered. In any case one hypothesis deserves mention. According to this, some dual suffix, which began with a consonant, but of which nothing further is known, gave place to the plural locative suffix *-σι -σιν*; hence arose **νω-σιν* like *duō-bus*, **τοῖ-σι(ν)* like O.Icel. *tvei-mr* (compare too gen. Goth. *tvaddj-ē* Lith. *dvĕj-ū* § 311 p. 209); *-σ-* dropped according to rule (I § 564 p. 420), but in the corresponding plural forms it was preserved, or restored, by the analogy of *φύλακ-σι(ν)* and the like. This hypothesis certainly does not explain why the final nasal is differently treated in dual and plural. Of course *κόραιν* might be a late formation following the analogy *ἵπποι* : *κόραι*. Of *νῶιν* something more will be said in § 458.

Nominative Plural Masculine and Feminine.[1])

§ 313. Consonantal stems, and those in *-i-* and *-u-*, had in the parent language the case-suffix *-es*, which was perhaps

1) W. Schulze, Das Suffix des nom. pl. masc. und fem., Kuhn's Zeitschr. XXVIII 275 ff. The Author, Der nom. pl. der *ā*-Stämme im Griech. und Lat., *ibid.* XXVII 199 ff. Zeyss, Über den nom. plur. der consonantischen Declin. im Umbr., *ibid.* XVII 421 ff. Förstemann, Zur Gesch. altdeutscher Declin.: der nom. plur., *ibid.* XIV 161 ff.

originally only a sign of the plural (§ 186 p. 60). There is no reason why we should not see the same suffix in *-ōs*, *-ās*, and *-i̯ēs*, the Idg. endings of the *o*-, *ā*-, and *ī*- *i̯ē*-classes respectively; see I § 115 pp. 107 f., II § 185 p. 57.

o-stems have in Aryan, beside pr. Ar. *-ās* = Idg. *-ōs*, pr. Ar. *-āsas*, which we may conjecture to be an Aryan re-formation.

Armenian has *-k̑* for the case-sign, e. g. *dster-k̑* 'daughters', undoubtedly the same as *-k̑* in the suffix of the instr. plural, *-bk̑ -vk̑*; compare the terminations of the 1st. and 2nd. plural present of verbs, *-mk̑* and *-yk̑*. Bugge (Beitr. zur etym. Erl. der arm. Spr., 43 f.) explains *-k̑* as follows. He supposes that the particle *u* attached itself to the inflexional *-s* (cp. Gr. *πάν-ν* Skr. *bhárat-u* etc.), making **-su*, pronounced **-su̯* before sonants; **-s-u̯* became *k̑*, as initial *su̯-* does (I § 560 pp. 416 f.), and *k̑* was then adopted universally. The hypothesis at least deserves consideration.

The nom. plural, like the nom. dual (§ 284 pp. 190 f.), served in all periods for the vocative, and in Sanskrit both numbers when so used were accented upon the first syllable (§ 200 p. 83).

§ **314.** 1. *o*-stems. Pr. Idg. **u̯l̥qōs* 'lupi'. Skr. *vṛ́kās*; Avest. *-å̊* very rare, *amešå̊* = Skr. *amṛ́tās* 'immortales'; on O.Pers. *martiyā* 'homines' see below. Armen. *gailk̑*, see § 313. Umbr. prinuvatus prinuvatu *prinvatur* 'legati' *screihtor* 'scripti', Osc. Núvlanús. O.Ir. voc. *ā firu*, cp. below. Goth. *vulfōs* O.Icel. *ulfar* with pr. Germ. **-ōz*, O.Sax. *dagos* A.S. *daȝas* 'days' with pr. Germ. **-ōs*, see I § 581 p. 434, § 661. 5 p. 519, and Paul in Paul-Braune's Beitr. VI 550 f.

Remark 1. There is no sure foundation for an Idg. *-ēs* beside *-ōs* (cp. abl. sing. *-ēd* : *ōd* and the like, § 240 p. 133). Lat. *magistrēs* is doubtless an ad-formate of the *i*-class, and O.H.G. *wolfā -a* of the *a*-class; see below p. 214.

1. Aryan. Pr. Ar. *-āsas* beside *-ās*: Skr. Ved. *vṛ́kāsas* (Pāli *-āse*); Avest. *vehrkåŋhō* O.Pers. *bagāha* 'gods'. Outside of the Aryan languages no credible proof has been given of

the existence of this ending. We are accordingly drawn to conjecture, with Bopp (Vergl. Gr. I³ 450), that the Idg. suffix *-ās* has been extended by the *-as* of the consonant-class.

Remark 2. It is a very common thing to find a second case-suffix added to a fully formed case. The most obvious comparison is that of Pāli nom. pl. *kaññāyo* beside *kaññā* = Skr. *kanyās* 'maidens': from *rattiyo* (sing. *ratti*) and *vadhuyo* (sing. *radhu*) it was imagined that *-yo* was a nom. pl. suffix, and this was used to extend *kaññā*. In § 312 p. 211 we noticed El. *δυοί-οις* Pol. *dwu-ch*. Again, nom. pl. masc. O.Icel. *þei-r* 'the, these' (Runic *þai-R*) = Goth. *þái* Gr. *τοί* has taken *-r* (for *-z*) from substantives. Gr. acc. *Ζῆν-α* (§ 221 p. 98). Gen. Dor. *ἐμέο-ς*, § 450. Lith. instr. *tů-mì*. Mod.H.G. *den-en* in place of *den*, and the like (the Author, Morph. Unt. III 70).[1]) Examples from Russian are collected by Vetter zur Gesch. der nom. Decl. im Russ. pp. 36, 37.

Since Scherer, it has often been maintained that O.Sax. *dagos* A.S. *dagas* contain a suffix which answers to Skr. *-āsas*; see, for example, Mahlow Die l. Voc. 128, W. Schulze in Kuhn's Zeitschr. XXVIII 275. But this cannot be proved. It would be preferable to assume this suffix for O.Fris. *dagar* (see Möller, Paul-Braune's Beitr. VII 505), but the ending of *dagar* may equally well be derived from *-ōz (cp. O.H.G. *ir* I § 661. 5 p. 519). To say that forms corresponding to the Skr. *-āsas* are to be found in the O.Ir. plurals in *-a* from the pret. pass. in *-t*, such as *do-bretha* (sing. *do-breth*, II § 79 p. 232) is conjecture run wild. To support it we should at least need to show *-ai* used side by side with *-a*.

If, in spite of all considerations to the contrary, Skr. *-āsas* should prove to be proethnic, I would connect Idg. *-ōs, in Skr. *vṛ́kās* etc., with Skr. *-āsas* in the following manner: I would assume a pr. Idg. termination *-ōss side by side with *-ōses or *-ōsos (cp. the gen. sing. *-s* beside *-es -os*), whose- *ss* would in all languages be treated just like Idg. *-s* (cp. § 356 Rem.).

In Avestic, *-a* (Gāth. *-ā*), as *vehrka*, is very common beside *-å* and *-åŋhō*. The form is also used for the acc. plural. Its origin is doubtful.

Remark 3. Since Bopp, scholars have usually regarded this *-a* as the ending of the nom. acc. neuter. J. Schmidt, who agrees, compares Gr. *τὰ οἶτα* from *ὁ οἶτο-ς*, Lat. *loca* from *locu-s*, etc. (Pluralb. 7 f.). Osthoff's view has at least as much in its favour (Morph. Unt. II 93 f.). He regards these forms as dual (cp. nom. dual Gr. *χῶραι* Lat. *equae* used for the plural, § 315). On this view, forms in *-a* from consonantal stems, as *nar-a* 'men' *vac-a* 'voices', can be understood at once; Bopp's explanation makes it necessary to suppose that *-a* spread to these stems from the nom. pl. *vehrka*.

1) The conjecture offered in this place — that Skr. *-āsas* was first used with *ā*-stems — can hardly be right (cp. § 315).

Whether O.Pers. forms like *martiyā* (see above) are to be compared with Avest. *-å* (Skr. *-ās*), or with Avest. *-a*, cannot be decided.

Old Irish. The form in *-ōs, which became *-u* (I § 657. 6 p. 509) held its ground only in the vocative use, and its place in the nominative was taken by the pronominal ending *-oi̯ (see below, under 2); cp. Gr. voc.-nom. Ἑρμείᾱ beside Ἑρμείᾱ-ς § 190 p. 67. The confluence in form of the nom. in *-ōs*, used for the voc., and the acc. plural (§ 326) caused the acc. pl. of other stems to be used as a vocative, e. g. *cairtea* acc. voc. beside nom. *carit* (§ 334).

Old High German. I regard *wolfā -a* and *hirte* 'herdsmen' (*i̯o*-stem) as adformates of feminine forms like *gebā -a* and *sunte* (§ 315).

2. In five groups of languages the pronominal ending *-oi̯ has spread to nouns (the reverse is found in Umbro-Samnitic, as Osc. pús 'qui'): these are —

Greek. λύκοι like τοί.

Latin. O.Lat. *poploe*, *pīlumnoe*, later *populī*, *lupī* (I § 81 p. 74). An ending found on inscriptions of the sixth and seventh century of the city, in Plautus, and elsewhere, — *-ēs* (*-eis -īs*), as *magistrēs* — is taken from the *i*-class (§ 317). It was suggested by variant forms in the pronouns, *quēs* (stem *qui-*) and *quī* (stem *quo-*), *heis* and *hī*. Also Falisc. *magistreis*.

Remark 4. *deivos*, in the Duenos inscription, has been repeatedly explained as nom. plural (the latest attempt is by Conway, in the American Journ. of Phil., X 452). It is more likely to be locative plural, see § 357.

Old Irish. *fir* 'viri', *eich* 'equi', *cēli* 'comrades' (*i̯o*-stems) for *-*iī*; Gallic retains *-oi*, *Tanotaliknoi*. See I § 82 p. 77, § 657. 4 p. 508.

Germanic. This ending has been borrowed by adjectives only: Goth. *blindái* O.H.G. *blinte* pl. of 'blind' (I § 661. 6 p. 520); Goth. *blindái* doubtless for the regular **blinda* on the analogy of the monosyllabic *þái* (§ 263 Rem. pp. 165 f.).

Balto-Slavonic. Lith. *vilkaĩ*, *gerì* and *gerë-ji*, beside

which we have *tē*, see I § 84 pp. 80 f., § 664. 3 p. 523, § 671 p. 536, II § 406, Morph. Unt. V 57 footnote 1. O.C.Sl. *vlŭci*, *novi* 'novi', *ti* (I § 84 p. 82).

§ **315.** 2. *ā*-stems. Pr. Idg. **eḱu̯ās*. Skr. *áśvās*, Avest. *haẹnå*. Umbr. urtas 'ortae' *iuvengar* 'iuvencae', Osc. *scriftas* 'scriptae', Marruc. *asignas* 'hostiae' (or some meaning of the kind); Latin seems to have preserved this type in the form *matrona* found on two inscriptions of Pisaurum (*C. I. L.* I 173, 177; cp. I § 655. 9 p. 505). O.Ir. nom. voc. *tuatha*, *mnā* 'women' (I § 106 p. 99, § 657. 6 p. 509). Goth. *gibōs*, O.H.G. Alemann. *kebo* (on O.H.G. *gebā -a*, see below) A.S. *ȝiefa*, O.Icel. *gjafar*, pr. Ger. **-ōz*. Lith. *rañkos*.

Sanskrit. The Veda has not only *-ās* but *-āsas*, *áśvāsas*, as with the *o*-class (§ 314). It is much rarer with *ā*- them with *o*-stems, and in Iranian it is never found with *ā*-stems at all; hence it would seem to have spread from *o*-stems to those in *-ā-*. Now and then *-āsas* from an *ā*-stem has the meaning of the accusative (Lanman, Noun Infl. p. 363); the reason being that in this class nom. and acc. have always had the same ending, *-ās*.

Greek and Latin have *-ai̯* both in nouns and pronouns: Gr. χῶραι, ταί, Lat. *equae*, *istae* (O.Lat. inscr. *tabelai datai* and the like). These forms are probably not a re-formation following the *-oi̯* of the *o*-class, but the Idg. dual, whose value was changed to match them with *-oi̯*; see § 286 p. 194.

Old High German *gebā -a* and *sippe sippeā sippiā -a* (*i̯ā*-stem) took their ending, we may conjecture, from the *ī*-*i̯ē*-class (as *gutinne*, *gutinnā -a*), which had **-i̯ēs* as their original ending (§ 316). Before **-i̯ā* (**-i̯a*) = pr. West Germ. **-i̯ēz* became *-e* (Braune, Ahd. Gr. § 58 Anm. 1), *-ā* (*-a*) spread to *ā*-stems which had no *-i̯-*, and afterwards was restored from these to the *i̯*-stems again (cp. Braune, *op. cit.* § 209 Anm. 3). There is the same form-transference in the accusative singular, § 213 p. 91, and in the genitive singular, § 229 p. 117. In Anglo-Saxon levelling took place in the opposite

direction, and *ʒydenna* was due to the analogy of *ʒiefa sibba* = Goth. *gibōs sibjōs*. The Idg. ending *-ās* is preserved in pronouns, *deò dio* = Skr. *tyás*.

Old Church Slavonic *rąky* and *zmiję* (*zmija* 'snake') are accusative plural (§ 327). The use of this form was perhaps caused by the fact that the old form of the nom. pl. **ronkās*, when the *-s* dropped (I § 588. 7 p. 445) became identical with the nom. sing. (*rąka*); and it was helped on by the singular nominative and accusative having so frequently the same form (in Russian, the masc. acc. in *-y* is found used as nom. from the 13th or 14th century onwards).

§ **316.** 3. *ī- i̯ē*-stems (cp. p. 68, footnote 1). The Pr. Idg. form was doubtless **bhr̥ĝhn̥t(i)i̯ēs*. Lat. *faciēs*. It is doubtful whether O.Ir. *insi* is of this class (*-i* for **-iī(s)* with *-ī* for *-ē*), see § 229 Rem. 3 p. 117. O.H.G. *gutinne*, later *-innā -a*, see § 315. Lith. *žẽmės*.

In Aryan there has been a twofold re-formation. (1) Skr. Ved. *bṛhatīṣ* Avest. *barentīš*, with a weak stem, like the acc. pl. (§ 328), whence arose a symmetrical group *bṛhatī* : *bṛhatīm* : *bṛhatīṣ* matching with *áśvā* : *áśvām* : nom. acc. *áśvās*. (2) Skr. *bṛhatyàs* Ved. *-íyas* (only *bṛhatyàs* in post-Vedic Sanskrit) and Avest. *barentyō*, *daęvyō* (read *daęviyō*) 'she-devils', following the *ī- i̯i̯*-class (§ 323), cp. nom. acc. dual Skr. *bṛhatyāù* § 287 p. 194. Once in the Avesta occurs *-yå*, *bāminyå* 'lucidae', certainly not the direct representative of pre-Aryan **-i̯ēs*, but following the *i̯ā*-class (§ 315).

Greek too has the formation which follows the *i̯ā*-class, *φέρουσαι*; and so have Germanic — Goth. *frijōndjōs* A.S. *ʒydenna* (see § 315) — and Lithuanian, *rẽžanczios*. Compare p. 68, footnote 1.

Old Church Slavonic. *zemlję reząštę* are accusative forms like *rąky zmiję* (§ 315).

§ **317.** 4. *i*-stems. Pr. Idg. **ou̯ei̯-es*. Skr. *ávay-as*, *tráy-as* 'three'; Avest. *ažay-ō*, *trāy-ō* with non-original *ā*. Armen. *erek* 'three' for **tre(i̯)-es*, see § 313 p. 212. Greek Att. *ὄφεις* for **-ε(ι̯)-ες*; Ion. Att. *τρεῖς* Lesb. *τρῆς* Cret. *τρέες*.

Lat. *ovēs turrēs trēs*, Umbr. puntes 'pontes' *pacrer* 'propitii', *-ēs* for **-e(i̯)-es* I § 134 p. 121. O.Ir. *fāithi*, *trī*, see below. Goth. *ansteis þreis*, O.H.G. *ensti drī* (I § 142 pp. 125 f.). O.C.Sl. *pątīj-e pątij-e* m. (I § 68 p. 60, § 146 p. 131).

Aryan. Isolated examples of *-i̯-as* are found. Ved. *ary-ás* (*arí-* 'active, eager, pious'), cp. acc. pl. and gen. sing. *ary-ás*; also *vr̥ṣṭy-as* (M.Bh.) from *vr̥ṣṭi-* 'rain', Avest. *fravašyō* beside *fravašayō*, female genii.

The ending contained in Armenian *sirtk̔* is doubtful (cp. § 313 p. 212).

Greek. All dialects have **-ei̯-es* in τρεῖς (see above), but Heracl. acc. τρῖς (§ 330) is used for the nom. and acc. both. Substantives, except in Attic, have -ιες, ὄφιες βάσιες, on the analogy of *ī-* *ii̯*-stems such as πόλιες (§ 323), cp. the gen. sing. ὄφιος § 231 p. 119. As regards Hom. πόληες see § 260 p. 160.

Italic. Lat. has *-īs* beside *-ēs*, *ovīs oveis*, which I regard as the form of the acc. pl. (§ 330). The use of *-ēs* and *-īs* together was natural when once *-ēs* had found its way into the accusative plural on the analogy of *ped-ēs*, and was used along with *-īs* for the accusative. The explanation of Osc. aídilis 'aediles', with *-is* = *-īs*, is uncertain, owing to the scanty remains of the language.

Old Irish. *trī* (Cymr. *tri*) may be derived from **tre(i̯)es* by supposing that *-ee-* became *-ē-* in proethnic Keltic; **trēs* thus formed would become regularly *trī* (I § 74 p. 64); or we might assume that **-ees* became **-eïs*, **-iis*, **-īs* and lastly *-ī*. I think it not so probable that the ending contained in it is **-ii̯-es*, or that the form should be the accusative plural.

Balto-Slavonic. Lith. *nãktys trỹs* may be derived from **-ii̯-(e)s*, as *súnūs* from **-uu̯-(e)s*; but whence came these assumed endings? They can hardly be original. Did *i* and *u* come from the other cases of the plural, and take the place of *e* and *a* (for **-eu̯-es* would have become *-au̯-(e)s*, I § 68 p. 59)? O.C.Sl. *nošti* (fem.) is the form of the acc. pl., like fem. *rąky* § 315 p. 216.

§ 318. 5. *u*-stems. Pr. Idg. **sūneu̯-es.* Skr. *sūnáv-as*, Avest. *bāzav-ō.* Gr. Ion. πηχέες ἡδέες Att. πήχεις ἡδεῖς. Lat. *manūs* can be explained as **manou̯-(e)s* (*-ou̯-* for *-eu̯-* according to I § 65 p. 52)[1]); but see below. O.Ir. *mog^a^i* (*mug* 'servant'), O.Corn. *lichou* 'swamps', Gall. *Lugoves*; **-eu̯-es* first became **-ou̯-es* according to I § 66 p. 56, and then Irish **-o(u̯)i(s)*, British *-ou.* Goth. *sunjus* O.Icel. *syner synir* for pr. Germ. **-iu̯-iz* (I § 179 p. 156, § 660. 1 p. 516). O.C.Sl. *synov-e* (I § 68 pp. 59 f.).

Aryan. Sometimes *-v-as* in the Veda, as *śata-kratv-as* ‚effecting an hundredfold', similarly Avest. *yātv-ō* 'magicians'; cp. acc. pl. Skr. *-v-as* Avest. *-v-ō* beside *-ūn -ūš*, *-ūš* (§ 331), and gen. sing. Skr. *-v-as* Avest. *-v-ō* beside *-ōš -aoš* (§ 232 p. 122). As to the re-formation Avest. *daňhāv-ō* = O.Pers. *dahyāv-a* 'lands, regions' see § 261 pp. 161 f.

It is a question what termination we are to see in Armenian *zardk̑* (cp. § 313 p. 212).

Lat. *manūs* (see above) may also be the form of the accusative plural. This use of the accusative would have resulted from the relation between nom. *ovēs* : acc. *ovēs*, nom. *ped-ēs* : acc. *ped-ēs. manŭs* in Plautus is shortened metrically, like *canĕs* and similar words (§ 319).

Germ. Goth. *mans* O.H.G. *man* A.S. *men* 'men' for **manu̯-iz*, like the gen. sing. Goth. *mans* (§ 232 p. 122). O.H.G. *siti* follows the *i*-flexion.

Lith. *súnūs* like *nãktys*, see § 317, last page.

§ 319. 6. Nasal stems.

a. *n*-stems. Pr. Idg. **k̑(u)u̯on-es* 'canes'. Skr. *śván-as*, Avest. *spān-ō*; with the weak stem substituted Ved. *maghón-as* beside *maghávān-as* 'dispensers, givers, offerers', Avest. *ašāun-ō* beside *ašavan-o* pl. 'holy, pious'. Armen. *šunk̑*, *akank̑ akunk̑*, *ełink̑* 'stags' (cp. Bartholomae, Bezz. Beitr. X 294), see § 313

1) The syncope of the *e* of the final syllable would be later than the contraction of the two *e* 's in **ou̯e(i̯)-es* (§ 317).

p. 212. Gr. *κύν-ες* instead of **κυον-ες *πον-ες* (cp. *κύνα* § 218 p. 94), *τέκτον-ες ποιμέν-ες, ἀγιῶν-ες πευθῆν-ες; ἄρν-ες* like *κύν-ες*. Osc. humun-s (ū in the last syllable) 'homines', cp. Lat. *homōn-ēs* and Umbr. *homon-us* 'hominibus' with *-ōn-*, II § 114 p. 351. O.Ir. *coin*, *ārain*. Goth. *guman-s*, O.H.G. *gomon gomun*; A.S. *œxen exen* O.Icel. *yxn* 'oxen' for **uχsn-iz* (Skr. *ukšáṇ-as*) like Norse Run. *dohtr-iʀ* § 320; Goth. *tuggōn-s* O.H.G. *zungūn*; on the formative suffix in O.H.G. *gomon gomun*, *zungūn* cp. Streitberg Paul-Braune's Beitr. XIV 218 ff. Lith. *szùn-s* like Gr. *κύν-ες*, *ãkmen-s*. O.C.Sl. *jelen-e* 'stags', *dĭne* 'days' with weak stem (II § 114 p. 356), *zemljan-e* 'countrymen' (II § 115 p. 362).

Avestic has also *-a* instead of *-ō*, *xšafn-a* 'nights', see § 314 p. 213.

Latin. With this as with all the classes which follow, the old ending **-ĕs* gave place to *-ēs* (the ending of *i*-stems, § 317) before the Latin tradition begins: *can-ēs homin-ēs edōn-ēs*. This gave the means of distinguishing nom. pl. from gen. sing., but caused confusion with the acc. pl., but perhaps *-ēs* = **-e(i̯)-es* and *-ēs* = **-n̥s* were still distinct at the time when this change of ending took place. Survivals of Idg. *-ĕs* are seen in *quattuor* and perhaps *foris* (§ 320). Plautine scansions like *canĕs turbinĕs* are due to metrical shortening, as also is *manŭs*, § 318 (see A. Spengel, Reformvorschläge zur Metrik der lyr. Versarten bei Plautus, 309 ff.); original **-ĕs* must needs have become *-is*, as it did in the genitive singular.

Balto-Slavonic. Lith. *szùn-ys*, following the *i*-flexion (§ 317), beside *szùn-s*. Similarly O.C.Sl. *kamen-ĭje -ije* (*kamen-e* is not found) and *dĭn-ĭje -ije* beside *dĭn-e*.

b. *m*-stems. Skr. *kšám-as* from *kšam-* 'earth'; Gr. should have *χθόν-ες* instead of **χθομ-ες* (I § 204 p. 172), but it is hardly likely that the form ever occurs. Avest. *zim-a* from *zyå* 'winter frost' (weak stem instead of strong, and *-a* instead of- *ō*, § 314 p. 213), Gr. *χιόν-ες* 'falls of snow' instead of **χιομ-ες* (I § 204 p. 172), Lat. *hiem-ēs* (*-ēs* instead of *-ĕs*, see above). Compare II § 160 pp. 482 f.

§ 320. 7. *r*-stems. Pr. Idg. **mātér-es*, **dŏtor-es*, **qetu̯or-es* 'quattuor'. Skr. *mātár-as dātār-as*, Avest. *mātar-ō dātār-ō*; Skr. *catvár-as* Avest. *caϑwār-ō*; the feminine of this is Skr. *cátasr-as* Avest. *cataϑr-ō*, with non-original weak stem like Skr. *tisr-ás* f. 'three'; that the weak stem is not original is clear from Avest. *tišar-ō* and O.Ir. *teoir*, *cetheoira cetheora* (with *-a* following *inna* etc.); see § 167 pp. 8 f.[1]). Armen. *mark̔*, *dsterk̔* 'daughters', *č̣ork̔* 'quattuor', *durk̔* 'doors', see § 313 p. 212. Gr. *μητέρ-ες θυγατέρ-ες* Hom. *ἀνέρ-ες* (Hom. *θύγατρ-ες* Hom. Att. *ἄνδρ-ες* are re-formates), *δώτορ-ες*; *δοτῆρ-ες*; Dor. *τέτορ-ες* Ion. *τέσσερ-ες*, with weak stem Att. *τέτταρ-ες* Lesb. *πέσυρ-ες*. Lat. *quattuor*, Osc. keenzstur *censtur* 'censores' Umbr. frater 'fratres' (cp. the Remark) with *-r* for *-r(e)s* according to I § 655. 9 p. 506. O.Ir. *māthir*, *cethir*, fem. *teoir* (I § 657. 5 p. 508). O.H.G. *muoter*, Norse Run. *dohtr-iʀ* O.Icel. *dōtr* A.S. *dehter* 'daughters' like Hom. *θύγατρ-ες*; Goth. *fidvōr* (*ō* doubtless from the neuter) O.H.G. *fior* 'quattuor' (§ 168 pp. 9—11); O.H.G. *turi* f. 'door' was perhaps originally nom. pl. = Skr. *dúr-as*, *-i* = **-is *-es* according to I § 661. 2 p. 517. Lith. *móter-s*; O.C.Sl. *datel-e* 'datores' (II § 122 p. 389), *četyr-e* m. 'quattuor'.

Avest. *nar-a* beside *nar-ō* '*ἀνέρες*' and the like, see § 314 p. 213.

Italic. Perhaps Lat. *foris* f. 'door', since the word may really be a nom. pl. from *for-*, like O.H.G. *turi* above. In any other case it will be needful to assume that a singular *for-is* was coined at some period to correspond to the plural *for-ēs*, on the analogy of *ovēs* : *ovis*. *mātr-ēs datōr-ēs* follow the *i*-class, see § 319 p. 219.

Remark. Beside frater *frater* in Umbrian, *frateer* is found once, Tab. V. *b* 16. It should hardly be compared with Gr. *φρᾱτῆρ-ες* (beside *φρᾱτορες φρᾱτερες*) *δοτῆρες* (II § 120 p. 379), although the word, in Umbrian as in Greek, bears only the sense of 'comrades'. The reasons

1) The change of stem from strong to weak in the nominative was due to the absence of singular and dual cases, so that the nominative was the only case which had the strong stem at all.

for not allowing this form are: (1) In line 11 we read *frat.er*, with the fifth letter erased. It was doubtless *e*; and if so it seems that we have here a mistake made twice, and only corrected once. (2) Along with this nominative the gen. *fratrom* and dat. *fratrus* are in use. But a stem *frātēr-* would doubtless have been carried through all the cases, as are those in *-tōr-* (*ars-fertūr-* 'flamen'). Nor do I see any means of supporting the view that an older Umbr. nom. pl. *frātĕr* has lengthened its *e* in order to draw a line between nom. pl. and nom. sing. (Bücheler, Umbr. pp. 180 and 191). I therefore consider *frateer* to be nothing but an oversight. The form *frātĕr* may be explained as **frātr-(ĕ)s* (cp. Lat. *frātr-ēs*), compare *ager* for **agr(o)-s*, I § 655. 9 p. 506.

Germanic. Goth. *brōþrjus* follows *sunjus* because of the resemblance between *brōþrum* and *sunum* (II § 122 p. 388). O.H.G. *bruoderā -a* and *tohterā -a* (cp. Braune, Ahd. Gr. pp. 171 f.), following *o-* and *ā*-stems (§§ 314, 315).

Old Church Slavonic *materi* follows the *i*-class (§ 317 p. 217).

§ **321.** 8. Stems ending in an Explosive.

Pr. Idg. **bhṛĝhont-es.* Skr. *bṛhánt-as*, Avest. *ber^{e}zant-ō.* Gr. *φέροντ-ες.* O.Ir. *carit.* Goth. *frijōnd-s* O.H.G. *friunt.* O.C.Sl. *veząšte* instead of **veząte*, the *š* coming from cases which had *-i̯o-*, cp. *veząštĭ* § 219 p. 96.

The *nt*-participles in Lithuanian show a double formation. One group of dialects has *vẽžantys* after the analogy of *i*-stems (cp. dial. *ãkmenys* beside *ãkmens*, and the like); the other group (High Lithuanian) has *vežą̃*, which can hardly be anything else but the form of the nom. acc. neuter (cp. § 225 p. 105, and § 342); but how it came to be so used is still unknown (cp. Joh. Schmidt in Kuhn's Zeitschr. XXVI 362 f., and Pluralb. 162 f.).

Gr. *νύκτ-ες*, Goth. *naht-s* A.S. *niht* 'nights'. Skr. *daśát-as* Lith. *dẽszimt-s* O.C.Sl. *desęt-e* 'tens' (cp. § 174 p. 23).

Skr. *śarád-as* 'autumns'. Gr. *φυγάδ-ες.* O.Ir. *druid* 'Druids'. A.S. *hnit-e* (*-e* = pr. Germ. **-iz*) beside acc. sing. *hnit-u* 'nit, louse's egg' (§ 219 p. 96), similarly A.S. *hnyt-e* 'nuts' = O.Icel. *hnøt-r.* Pr. Idg. **pod-es* 'feet': Skr. *pád-as*,

Armen. *ot-k'* (cp. § 313 p. 212), Gr. *πόδ-ες*, A.S. *fēt* O.Icel. *fōt-r* pr. Germ. **fōt-iz*, cp. II § 160 p. 480.

Skr. *uśíj-as* 'those who are desirous', Avest. *miθrō-druj-ō* they who deceive Mithra'. Gr. *μείραϰ-ες*, *ὄρτυϰ-ες ὄρτυγ-ες*. O.Ir. *na-thraig* 'water-snakes'. Skr. *spáś-as* Avest. *spas-ō* 'spies, inspectors' (Lat. *au-spic-ēs*). Skr. *vác-as* Avest. *vāc-ō*, Gr. **ὄπ-ες* (Lat. *vōc-ēs*). Skr. *rā́j-as* O.Ir. *rīg* (Lat. *rēg-ēs*) Goth. *reik-s* (I § 74 p. 64), Idg. **rēĝ-es* 'rulers'. Osc. *medix* 'meddices' for **med-dik-es*, cp. Lat. *jū-dic-ēs* and Skr. *díś-as* 'directions, indications, instructions'. O.Ir. *brig* 'mountains', Goth. *baúrg-s* O.H.G. *burg* A.S. *byrȝ* 'fortresses, cities', Avest. *bar^{e}z-ō* or *ber^{e}z-ō* (inferred from the other cases which are found), cp. II § 160 p. 479. O.H.G. *buoh* A.S. *bēc* 'books', pr. Germ. **bōk-iz*.

Skr. *ā́p-as* Avest. *āp-ō* 'waters'. Gr. *ϰλῶπ-ες* 'thieves'.

Avestic also has *-a* instead of *-ō*, as *vac-a* beside *vāc-ō*, see § 314 p. 214.

Lat. *-ēs*, *ferent-ēs lapid-ēs ped-ēs bibāc-ēs vōc-ēs rēg-ēs dap-ēs*, following the *i*-class, see § 319 p. 219.

§ **322.** 9. *s*-stems.

Pr. Idg. **dus-menes-es*. Skr. *durmanas-as*, Avest. *dušmanəh-ō*. Gr. *δυσμενέες -εῖς*. — Skr. *uṣā́s-as uṣás-as*, cp. § 220 p. 97. — Gr. *μῆν-ες* Lesb. *μῆνν-ες*, (Lat. *mēns-ēs*.) O.Ir. *mīs*, cp. II § 132 p. 415; Skr. *mā́s-as* Avest. *mā̊nəh-ō* 'months', cp. II § 134 pp. 424 f.

Pr. Idg. comparative **ōk̑(i)i̯os-es* 'ociores'. Skr. *áśīyā̆-as*, for the nasalised formative suffix see II § 135 p. 430; in the post-Vedic language rarely *-īyas-as*, like the acc. sing. *-īyas-am* § 220 p. 97. Gr. *ἡδέ̆ους* for **-ĭο(σ)-ες*; with the weak stem, Hom. *πλέ̆ες* Cret. *πλίες* for **πληι̯σ-ες* (II § 135 pp. 429 and 432). O.C.Sl. *slaždĭše* perhaps for **-ĭche*, earlier **-is-es* according to I § 588. 2 p. 443; *š* may also have come from *-si̯-*, with *-i̯-* from the cases which had *-i̯o-*, cp. *veząšte* § 321 p. 221.

Pr. Idg. part. perf. act. **u̯ei̯du̯os-es*. Skr. *vidvā́s-as* (for *ā*, see II § 136 p. 441); in the Veda and later we sometimes

meet with the weak formative suffifix *-úṣ-as*, *vidúṣ-as* (cp. acc. sing. § 220 p. 97); Avest. *vīđvåŋh-ō*. O.C.Sl. *mĭrŭše*, to be explained in the same way as *slaždĭše*, above; and compare the acc. sing. *mĭrŭšĭ* (§ 220 p. 97). In regard to Gr. *εἰδότ-ες*, see II § 136 p. 440. Lith. *mìrę* following *vežą̃* (§ 321 p. 221), compare the nom. sing. *mìręs* : *vežą̀s* (II § 136 p. 441, III § 193 p. 73); a dialectic variant is *-usys*, like *-antys*.

Pr. Idg. **mūs-es* 'mures': Skr. *mū́ṣ-as*; Gr. *μῦ-ες* and *μύ-ες*, the latter following stems in *-ū- -uu̯-* (II § 160 p. 485); A.S. *mȳs* O.Icel. *mȳs-s*.

Latin. *-ēs*, *dēgener-ēs honōr-ēs mēns-ēs*, *ōciōr-ēs*, *mūr-ēs*, following the *i*-class, see § 319 p. 219.

§ 323. 10. *ī- ii̯-* and *ū- uu̯-* stems, and stems ending in *-r̥̄*, *-l̥̄*, *-n̥̄*.

Pr. Idg. **-ii̯-es*, **-uu̯-es*, e. g. **bhruu̯-es* (nom. sing. **bhrū-s* 'brow'). Skr. *dhíy-as* 'thoughts, meditations' Ved. *nadíy-as* 'rivers', *bhrúv-as* Ved. *śvaśrúv-as* 'mothers-in-law'. In Avestic **-ii̯-es* is represented by certain forms of *ī- i̯ē*-stems, which follow the analogy of this class, e. g. *daęvyō* i. e. *daęviy-ō* (§ 316 p. 216); and **-uu̯-es* by *tan(u)v-ō* 'bodies'. Gr. *κί-ες πόλι-ες* (from *πόλῑ-ς*), *ὀφρύ-ες ὕ-ες νέκυ-ες* (from *νέκῡ-ς*).

Lat. *su-ēs*, with *i*-flexion, see § 319 p. 219; *vīs* (beside *vīrēs*), to be explained like the gen. sing. *vīs* § 233 p. 123. O.Icel. *sȳr* 'sues' like gen. sing. *sȳr*, see § 233 p. 123. O.C.Sl. *krŭv-i* f., *svekrŭv-i* f. following the *i*-class (§ 317 p. 217).

Skr. *gír-as* 'songs of praise' = **gr̥r-es*, *púras* 'strongholds' = **pl̥l-es*, *gōṣáṇ-as* pl. 'gaining kine' = **-sn̥n-es*. Compare II § 160. 4 pp. 485 f.

§ 324. Certain Root Nouns in *-u̯* and *-i̯*.

Pr. Idg. **nāu̯-es* 'naves': Skr. *nā́v-as*, Gr. *νᾶ-ες νῆ-ες νέ-ες* (I § 610 p. 461); Lat. *nāv-ēs* follows the *i*-class, see § 319 p. 219.

Pr. Idg. **gou̯-es*: Skr. *gā́v-as*, Gr. *βό-ες*, and perhaps Mid.Ir. *bai* (*ai* and *oi* are confused in Middle Irish);

Lat. *bov-ēs* like *nāv-ēs*; O.H.G. *kuo* A.S. *cȳ* O.Icel. *kȳr* are re-formates, see § 199 p. 80, § 221 p. 98, § 238 p. 130.

Skr. *rā́y-as* 'treasures, goods', Avest. *rā́y-ō*. Lat. *rēs* for **rē(i̯)-ĕs*, or an Italic re-formate.

Accusative Plural Masculine and Feminine.[1])

§ 325. The general ending in the parent language for this case was *-ns*. The view which assumes *-ms* as the ending is opposed by what we find in Baltic; see § 186, page 61.

1. *-ns* was pronounced *-n̥s* after stems ending with a consonant. From *-n̥s* come Ar. *-as*, Armen. *-s*, Gr. *-ας*, Lat. *-ēs* Umbr. *-f*, Goth. *-uns*, Lith. *-is*. [See I § 224 p. 192, § 232 p. 197, § 233 p. 197, § 238 p. 200, § 244 p. 202, § 249 p. 204; as to Armen. *-s* for *-*a(n)s*, see further I § 202 p. 169, § 651. 3 p. 497; for Umbr. *-f*, I § 209 p. 177 and Duvau's essay (see footnote 1); as regards Lith. *-is* for **-i̯s*, I § 664. 3 p. 523.

O.Ir. shows the ending *-a*, as *con-a* 'canes' *aithrᵉa*. The ending is *-as* in Gallic, *Lingon-as Bitwing-as* (it is true we know the forms only as Roman authors have preserved them), and Windisch (Paul-Braune's Beitr., IV 215) would have it that *-a* has come from the *ā*-class. But so long as the history of *n̥* in Irish has not been made clear in all points, we shall have to regard *-a* provisionally as directly representing **-n̥s*. Perhaps *-n̥s*, becoming first **-ans*, passed very early into **-āⁿs* **-ās*; for in tracing the suffix of the acc. pl. of *o*-stems, *-u* (§ 326), we come to **-ās* at the first step, and this brings

1) Bartholomae, Der arische acc. plur. masc. der *i̯*-, *u̯*- und *r*-Stämme, Kuhn's Zeitschr. XXIX 483 ff. Curtius, Der griech. acc. plur., *ibid.* I 258 f. O. Keller, Der Acc. auf *is* der 3. Decl. bei den august. Dichtern, Rhein. Mus. XXI 241 ff. L. Duvau, Le group final **-n̥s* à l'acc. plur. des thèmes consonantiques de l'ombrien, Mém. de la Soc. de lingu. VI 223 ff. Stokes, Der acc. plur. in den britischen Sprachen, Kuhn-Schleicher's Beitr. VII 69 ff.

us to *-*ōs* and lastly to *-*ŏns*, which points to a very early loss of the nasal. Cp. Lat. *pedēs* for *-*ens* as contrasted with *ēnsi-s* (earlier *ĕnsi-s*), I § 208 p. 175.

Stems that show vowel gradation, such as Skr. *ukṣán-* Goth. *aúhsan-* 'ox', have generally a weak stem in Sanskrit, and a strong stem in Greek. As to which of the two reproduces the older form, probability is on the side of Sanskrit (cp. *catúr-as* = Lith. *kẽtur-is* Gr. Aeol. *πίσυρ-ας*); but the matter is still an open question. Since *ṇ̥* in Aryan and Greek became *an αν* (I § 226 p. 193), it must be provisionally assumed that Ar. *-as* is regular only in such forms as Skr. *tákṣṇ-as bhárat-as bhrúv-as*, and spread thence to *ukṣṇ-ás bṛhat-ás* etc.

2. Whether or not *o-*, *i-*, and *u*-stems had *-o-ns*, *i-ns*, and *-u-ns* respectively in pr. Idg., is uncertain; not that Lith. *gerů's-ius* makes it so (see § 326), but because of Skr. *-ā̆s -ān*, *-ī̆r -īn*, *-ū̆r -ūn*, whose long vowel we must doubtless regard as belong to the proethnic period of Aryan at the latest (§ 327).

Remark. If we take Idg. *-ōns* as our starting point (cp. Hanssen in Kuhn's Ztschr. XXVII 615, and Bremer, Berl. phil. Wochenschr. 1887 p. 502), we should have to assume a shortening of the vowel for the European languages, according to the principles laid down in I §§ 611 ff. *-ōns* would be related to *-ṇ̥s* as abl. sing. *-ōd* to the *-d* of Skr. *mā-d* 'a me' (§ 240 p. 134): *-īns -ūns* might be regarded as an Aryan re-formation following *-ōns* — Skr. *-ī̆r -ī̆n* and Avest. *-eraš* in *r*-stems certainly are an Aryan re-formation; or if they were held to be original, *-ōns* would bear the same relation to *-īns -ūns* as the instr. sing. Skr. *vṛ́kā* to Skr. *matī́* Avest. *bāzu* (§§ 274 ff.), or as the nom. acc. dual Skr. *vṛ́kā* to *ávī sunū́* (§§ 284 ff.) But it is quite possible to regard the Aryan forms with a long vowel as an Aryan analogical formation: it may be supposed that *-*āns* followed the nom. pl. in *-ās*, being influenced by the fem. acc. nom. pl. *-ās*, and that the long vowel thus produced in *o*-stems influenced those in *-i-* and *-u-*, and finally those in *-r-*. Compare Bartholomae, Stud. zur idg. Sprachg., I 37 f.

3. *ā*-stems had pr. Idg. *-ās*, as in the nominative plural. J. Schmidt's theory that this ending came from *-āns* (see I § 220 p. 188) is unsafe enough.

§ **326.** 1. *o*-stems. Pr. Idg. **u̯l̥qo-ns* (**u̯l̥qōns?* see § 325). Skr. *vṛ́kāṣ vṛ́kān* for **-āns* (see I § 647. 7 p. 494); *vṛ́kānt* before *s-*, as we must assume with Whitney, is simply *-ān s-* with parasitic *t* serving as a transition sound, or glide[1]). Avest. *vehrkąn vehrkąs(-ca)*, cp. below. Armen. *gail-s.* Gr. Cret. *λύκονς* Dor. Boeot. *-ως* Ion. Att. Dor. *-ονς* Lesb. *-οις*, with the variant (pr. Greek and onwards) *-ος* for *-ονς*, see I § 204 p. 171, § 205 p. 172. Lat. *lupōs* (I § 208 p. 175); Umbr. *abrof* 'apros' Osc. feíhúss 'fines' (I § 209 p. 177). O.Ir. *firu*, *cēliu* 'socios' (I § 212 pp. 178 f., § 657. 6 and 10, pp. 509, 510, III § 325 p. 224); also *inna* (the article, from **sen + to-*), for **-dās*, earlier **-tōs*, when used before an accented syllable (cp. *inna n-* § 429). Goth. *vulfans* O.Icel. *ulfa.* Pruss. *deiwans* 'deos', O.C.Sl. *vlŭky*, *krajǫ* from *krajĭ* 'edge, rim' (I § 84 p. 80, § 219. 4 p. 187, § 665. 4 p. 525).

Aryan. Seeing that Avestic *ą* represents nasalised *a* both long and short (I § 21 p. 24, § 200 pp. 168 f.), it is impossible to say whether **-ans* or **-āns* is to be assumed as the parent form. An attempt will be made in § 330, Remark, page 231, to shew that it is more likely to have been **-āns.*

The Avestic variants *vehrka* Gāth. *vehrkā* are to be explained like the same forms used for the nominative plural, see § 314 p. 213. We further find Avest. *-å*, e. g. *amešå* 'immortales', which we conjecture to be the nom. form (= Skr. *amṛ́tās*, § 314 p. 212); its use as an accusative grew up from the use of acc.-nom. *vehrka* (cp. Skr. acc. fem. *-āsas*, § 315 p. 215); yet be it observed that the nom. acc. pl. neuter also had variants *-å* and *-a* (§ 338).

The Old Persian *martiyā* 'homines' cannot be accurately estimated. In this dialect, sounds are most inadequately represented in writing; it should be noted in particular that nasalised vowels are not distinguished from others in writing (I § 200 p. 168). Moreover, the record of Old Persian is too

1) Compare the Author, Litau. Volksl. und Märch., 289; Bartholomae, Stud. zur idg. Spr., I 36 f. The conjecture offered in vol. I of this work, § 557. 1 p. 412, cannot hold water.

scanty to give any satisfactory knowledge of the laws for final syllables. Compare what is said in § 314, p. 214, on nom. pl. *martiyā*.

In West-Germanic the nominative did duty as accusative: O.H.G. *tagā* *-a* O.Sax. *dagos* A.S. *daʒas* (§ 314 pp. 212, 214). The same is true of the other classes of stems, and in some degree of all Germanic languages. The cause of this syncretism may have been that from a very early period acc. and nom. pl. had been represented by the same form in *ā-* and *ī-* *i̯ē*-stems (§§ 327, 328).

Lith. *vilkùs* (dial. *vilkuns*), *gerů's-ius* (dial. *geruns-ius*) and *gerùs*, *tů's* and *tùs* (cp. instr. sing. fem. *tá* and *tà*, on which variation of accent Bezzenberger offers a conjecture which deserves consideration, Bezz. Beitr. X 204); similarly Lett. *wi'lkus* and *tõs* (*õ* = *ů* with the 'lengthened' or 'drawled' accent). It cannot be shewn that the Lith.-Lettic group *ăns* (Idg. **ŏns*) became High Lith. *ůs*; and to take as a starting point Lith.-Lettic **-ůns* **-ōns* = Idg. **-ōns* is out of the question, because Idg. **-ōns* becomes *-ăns* (I § 615 p. 465). I therefore assume that the *ů* *ō* of the ending **-ůns* **-ōns* (for the shortening to Lith. *-ù(n)s* see I § 664. 3 p. 523) came from other cases, first of all from the loc. plural in *-ůsu* *-ůse* (Lett. *-ůs*).

Remark. Before going on it may be well to follow out this matter to the end. In the locative plural, then, the old ending **-aisu* **-ēsu* = O.C.Sl. *-ěchŭ* Skr. *-ēṣu* (see § 357) was transformed to *-ůsu* by proportional analogy, to match **-āsu* *-ōsu* in the *ā*-class and **-iēsu* *-ēsu* in the *ī-* *i̯ē*-class, and similarly **-isu* = O.C.Sl. *-ĭchŭ* Skr. *-iṣu* (*i*-stems) became *-īsu* (*nakty-su* *-sè*); compare loc. pl. Ital. *-ōs* following *-ās* (§ 357), Lat. *istōrum*, *equōrum* following *istārum*, *equārum* (§ 345), Gr. dual *νύμφᾱ* (instead of *νύμφαι*) following *λύκω* (§ 286 p. 194). This change was very old, as we know from Lett. *-ůs* *-ís* (beside *-ás* *-és*)[1]. The adoption of *ů* *ō* into the acc. pl. was all the easier because there was a close similarity of meaning between the acc. pl. with *-na* affixed (e. g. *namůs-nà* 'homewards') and the loc. pl., and the fem. accusative endings *-ōs* *-ēs* (*-ōs-na* *-ēs-na*) had always had a long vowel. Once the re-formation **-ůns* was established, its influence was felt in three ways. (1) A dialectic

1) Lith. *vĕnů-lika* *dvý-lika* seem also to have been assimilated to *trý-lika*, *keturiò-lika* and the rest (compounds with the nom. acc. pl. neuter as first member) by proportional analogy. See § 175 pp. 28 f.

loc. *vilkunse* appeared, which followed the acc. *vilkuns vilkuns-na*. (2) The confluence of *o*- and *u*-stems in acc. and gen. plural (acc. *dangùs* 'caela', *-us* = Goth. *-uns* etc.; gen. *dangū* for **dangu̯-ū* § 349) produced the re-formates *dangůs-nà* and *dangůsè*. (3) An intrusive *n* appeared in the acc. of pronominal *ā*-stems with Lith.-Lett. *-ās* (*-ōs*) = Idg. *-ās* (§ 327): O.Lith. and dial. *pirmans-es* (Mod.High Lith. *-ás-es*) 'has primas'.

The loc. pl. Lith. *-yse* Lett. *-ìs* at once suggests the conjecture that in Lith.-Lett. not only **-ŏns* (*o*-stems), but **-ins* (*i̯*-stems), and it may be also **-uns* (*u*-stems) lengthened the vowel. No direct evidence for prehistoric **-īns *-ūns* is forthcoming.

§ **327.** 2. *ā*-stems. Pr. Idg. **eḱu̯ās* (cp. § 325. 3 p. 225). Skr. *áśvās*, Avest. *haẹnå*. Lat. *equās*, but compare (2) below. O.Ir. *tuatha*, *mnā* 'mulieres', but cp. (2) below. Goth. *gibōs*, O.H.G. Alemann. *kebo*, A.S. *ȝiefa*, O.Icel. *gjafar*. Lith. *rankàs*, *rankos-nà* 'into the hands', Lett. *růkas*, cp. (1) below.

1. As to Vedic *-āsas* beside *-ās* (*araəgamāsas* from *araəgamá-* 'expectant, offering oneself'), see § 315 p. 215.

O.H.G. *gebā -a* and *sippe sippeā sippiā -a* are to be explained in the same way as the same forms when used for the nom., see § 315 p. 215. Compare *gutinne -innā -a* § 328.

Lith. *rankàs* never contained a nasal, which is proved by the use of this form in those modern dialects which show *-uns* as the *o*-stem ending.[1]) *-ans-es* occurs only in pronouns; it is a re-formation, see (2) below, and § 326 Rem. p. 227.

2. In the following branches, Idg. *-ās* was driven out by some form with *-ns*, through assimilation to the other classes of stems. It is doubtful whether this first took the shape of **-āns*, and the *ā* was then shortened according to I §§ 611 ff., or whether the ending became **-ăns* at once.

Greek. Argive and Cretan *-ăνς*, as Arg. *Ἀλεξανδρείανς* Cret. *πρειγευτάνς* (Att. *πρεσβευτάς*), Dor. Boeot. Ion. Att. *-ᾱς*, Lesb. *-αις*. A variant dating from proethnic Greek was *-ᾰς* for *-ᾰνς*, as *-ος* for *-ονς* (§ 326 p. 226). See I § 204 p. 171, § 205 p. 172.

1) Moreover, if **-ans* were the parent ending, the Lettic form must have been **růkus*.

Italic. Umbr. *vitlaf* 'vitulas', Osc. víass 'vias' (I § 209 p. 177). Since there is no question that these forms come from *-*ans*, the equation Lat. *equās* = Skr. *áśvās* (see preceding page) is at least doubtful (see I § 208 p. 175).

Old Irish. *tuatha*, *mnā* may be derived from either *-*ās* or *-*ans* (I § 212 pp. 178 f., § 657. 6 and 10, pp. 509 f.). Gall. *artvass* 'gravestones' (see Stokes, Bezz. Beitr. XI 115) would be decisive in favour of *-*ans*, if ⋈, the last symbol in the word, is really to be read as *ss*.

Balto-Slavonic. Pruss. *gennans* 'mulieres' like masc. *deiwans*; the similarity here caused the formation of nom. pl. *gennai* after the analogy of the masc. *-ai* (unless indeed the masc. ending *-ai* instead of *-ās* is simply due to carelessness on the part of the translator; see Brückner, Archiv für slav. Phil., IV 28). O.Lith. and dial. *pirmans-es*, see above. O.C.Sl. *rąky zmiję* (*zmija* 'snake') for pr. Slav. *-*ŏns* (I § 219 pp. 185 f., § 615 p. 465); if the re-formation is later than the confluence of Idg. *a* and *o*, the endings *-y -ę* were always like those of the masc. *vlŭky* and *kraję*.

§ **328.** 3. *ī- i̯ē*-stems (cp. p. 68, footnote). The original ending is not clear.

Skr. *bṛhatīs* Avest. *barentīš*, with rare variants *-íyas -yàs*) and Avest. *-yō*, as with the *ī- i̯ā*-class (§ 329).

O.H.G. *gutinne*, later *-ā -a*, and Lith. *žemės-nù* ('into the countries') *žemės* certainly have original *-i̯ēs*, like the nom. pl. *gutinne* and *žẽmės* (§ 316 p. 216). In Lat. *faciēs* is the same ending, unless it be *-ns* like Umbr. *iovie(f)* 'iuniores', which seems to have developed out of an old abstract noun (as Lat. *prō-geniē-s*, II § 111 p. 339): a different explanation may be found in Bechtel's paper, Bezz. Beitr. VII 4 ff.

Gr. φερούσᾱς, Goth. *frijōndjōs*, Lith. *vẽžanczias*, and perhaps O.C.Sl. *zemlję* following the *i̯ā*-class.

O.Ir. *insi* is ambiguous.

Remark. If we were right in assuming *-*(i)i̯m̥* as a proethnic variant of *-*īm* in the acc. sing. (§ 216 p. 93), there may have been Idg. *-*(i)i̯n̥s* in the plural. From this might be derived Lat. *faciēs*, Umbr.

iovie(f), O.C.Sl. *zemlję*, Ved. *-íyas* Avest. *-yo*. Then the question would arise — have not Gr. *-ιμᾰνς -μᾰνς* suffered some analogical change following the *i̯ā*-stems, their previous form having been *-ιμᾰς -μᾰς* = Idg. **-i̯i̯ns *-i̯ns*? Then the older *-(ι)μᾰς* may be still represented by the pr. Gr. variant of *-(ι)μᾰνς* used before consonants (cp. *-ᾰς* beside *-ᾰνς*, § 327).

§ **329.** 4. *ī- i̯i̯-* and *ū- u̯u̯*-stems and stems in *-r̥̄ -l̥̄ -n̥̄*.

Pr. Idg. **-i̯i̯-n̥s *-u̯u̯-n̥s*, e. g. **bhru̯u̯-n̥s* (nom. sing. **bhrū-s* 'eyebrow'). Skr. *dhíy-as* Ved. *nadíy-as*, *bhrúv-as* Ved. *śvaśrúv--as*. Gr. *κίας πόλιας* (from *πόλῑ-ς*), *ὀφρύας ἰχθύας νέκυας* (from *νέκῡ-ς*); Herod. *πόλῑς* from *πόλῐ-ς* following the *i*-class (§ 330), Hom. Herod. Att. *ὀφρῦς* Hom. *νέκῡς* following the *u*-class (§ 331). Lat. *su-ēs*; *vīs* (beside *vīrēs*) like nom. pl. *vīs* (§ 323 p. 223). Lith. *žuv-ìs* = *ἰχθύας*.

O.Icel. *sȳr* is the nom. form (§ 323 p. 223). O.C.Sl. *krŭv-i svekrŭv-i* follow the *i*-class (§ 330).

Skr. *gír-as* 'hymns' = **gr̥r-n̥s*, *púr-as* 'strongholds' = **pl̥l-n̥s*, *gō-ṣáṇ-as* pl. 'gaining cattle' = **-sn̥n-n̥s*. Compare II § 160. 4 pp. 485 f.

§ **330.** 5. *i*-stems. Pr. Idg. **ou̯i-ns*, **tri-ns* 'tres' (**ou̯īns *trīns*? see § 325 p. 225). Skr. masc. *ávīr ávīn*, *ávīnt s-* like *vr̥kānt s-* § 326 p. 226; Avest. masc. *ažīš*[1]), see below. Armen. *sirts*; and *eris*, which retains the *i* (I § 202 p. 169). Gr. Hom. *ὄῖς* Ion. *προήσῑς* Dor. Boeot. *τοῖς*. Lat. *turrīs ovīs trīs*, also written *turreis* etc.; Umbr. avif *aveif* 'aves' trif *treif* 'tres'. O.Ir. *fāithi*, *trī*. Goth. *gastins anstins þrins*, O.Icel. *geste*. Lith. *naktìs trìs* perhaps representing a re-formation in **-íns*, see § 326 Rem. p. 227; O.C.Sl. *pąti nošti tri* (I § 219. 4 p. 187).

Aryan. In Sanskrit, answering to *-īn* and *-ūn*, the endings of masc. *i*- and *u*-stems, feminines have *-īṣ* (*ávīṣ*) and *-ūṣ* (*dhēnúṣ*), which are re-formations following *áśvās* (§ 327) and *bṛhatīṣ* (§ 328); but in Avestic both genders

1) There seems to have been no Avestic variant in *-i*, as there was no variant *-u* beside *-ūš* in *u*-stems. See Bartholomae, Kuhn's Ztschr. XXIX 486 f.

show the endings *-īš* and *-ūš* (fem. *īštīš* 'riches', *barᶜšnūš* 'heights').

Remark. Skr. *-ī̯r*, *-ū̯r*, *-r̥̄r* from *i-*, *u-*, and *r*-stems, for earlier **-īnš*, **-ūnš*, **-r̥̄nš*. In vol. I of this work, § 647. 7. p. 494, it was conjectured that *-š* was due to the influence of the *i- u-* and *r*-sounds, in spite of the preceding nasal; we assumed that a nasal, coming before *-s* when it did not stand at the end of a clause, and following a long sonant, was reduced to a mere nasalising of the sonant earlier than when it followed a short sonant, namely in proethnic Aryan (cp. I § 199 Rem. 1 p. 167). Now *-š* in Avest. *nerąš* cannot be separated from the ending of Skr. *nṛ́r*; so the Avestic form must be derived from **nr̥̄nš*, and not **nr̥nš*. On the same reasoning Avest. *ažīš* and *bāzūš*, if they have or ever had a nasal sound in the last syllable, come from **-īnš* and **-ūnš*, not **-inš *-unš*. This would prove that these various classes had a long vowel in the acc. plural in pr. Aryan.

But Avest. *-īš* and *ūš* in fem. *i-* and *u*-stems may be phonetically identified with Skr. *-īṣ* and *-ūṣ* in the same stems, and it is possible to assume that *-š* first belonged to these endings *-īš* and *-ūš*, whence in pr. Aryan it spread to the masculine forms (ending with *-ns*); cp. Bartholomae, Kuhn's Zeitschr. XXIX 483 ff., and Stud. zur idg. Spr., I 37 ff. In that case we should have no proof that the Skr. *-ī̯r -ṷr -r̥̄r* had a long sonant as early as the proethnic Aryan period. But considering that Skr. fem. *mātṛ́ṣ* has in Avestic the nasalised *māterąš* answering to it[1]), it becomes more probable that the Avestic fem. endings *-īš -ūš* also contained a nasal, and that the Skr. fem. *-īṣ -ūṣ -r̥̄ṣ* are Sanskrit reformations. But if these endings *-īš -ūš* are not so old as pr. Aryan, pr. Ar. *-nš* could not have obtained its *š* by analogy; and then our supposition that *š* is phonetic and nothing more gains in probability.

If then we are to postulate for proethnic Aryan **-īnš *-ūnš*, or, to write the sounds more exactly, **-īⁿs *-ūⁿs*, the *o*-stems too most certainly had a long vowel at this period, and their ending was **-āⁿs*.

Skr. *aryás* like nom. *aryás*, see § 317 p. 217. Avest. *garayō* 'hills' is clearly nom., like the acc. *gātav-ō* § 331 (compare further Th. Baunack, Stud. auf dem Gebiet des Gr. etc., I 456 footnote 1).

Greek. Hom. *πόσιας* Lesb. *κτήσιας* following the *ī- i̯i̯*-class (§ 329). Att. *τρεῖς ὄφεις βάσεις* are nom. So too the

1) R.-V. X 352 *mātṛ́n* does not come into consideration in this place, because it is joined with *masculine* substantives in apposition, something like an adjective: *mātṛ́nt síndhūn párvatān* 'motherly streams and hills' The form has often suggested wrong inferences.

Latin forms in *-ēs*, as *turrēs*, and those of West Germanic like O.H.G. *gesti ensti drī*. See § 317 pp. 216 f.

§ **331.** 6. *u*-stems. Pr. Idg. **sūnu-ns* (**sūnūns*? see § 325 p. 225). Skr. masc. *sūnū̆r sūnū́n*, *sūnū́nt s-* like *vṛ́kānt s-* § 326 p. 226; Avest. masc. *bāzūš*. Armen. *zard-s*. Gr. Cret. *υἱύνς* 'filios', Hom. *κλειτὺς γένῡς*. Lat. *manūs*. O.Ir. *bithu*. Goth. *sununs*, O.Icel. *sunu suno*. Lith. *súnus*, *dangùs* 'caela', perhaps containing a re-formation **-ū́ns*, see § 326 Rem. p. 227; O.C.Sl. *syny* (I § 219. 4 p. 187).

Aryan. Fem. Skr. *-ūṣ*, *dhēnū́ṣ*, like fem. *ávīṣ*, similarly Avest. *-ūš*, *bar^ešnūš* 'heights', like fem. *īštīš*, see § 330 with the Remark.

Vedic also shows *-v-as* (m. and f.), as *paśv-ás* 'pecora', and in Avestic there is *-v-ō* to correspond, e. g. *pasv-ō*, as in the nom. plural, see § 318 p. 218. Avest. *gātav-ō* 'places, seats, thrones' is a clear nom., like *garay-ō* just above (§ 330); and so also Avest. *daṅhāv-ō* = O.Pers. *dahyāv-a*, see § 318 p. 218.

Greek. Hom. *γλυκέας* Herod. *πήχεας*, a re-formation following the nom. in *-εες*. Att. *ἡδεῖς πήχεις* are nom. (§ 318 p. 218) like *ὄφεις* (§ 330).

Umbr. kastruvuf *castṛuo* 'fundos' from kastru- (cp. Osc. *castrovs*, § 232 p. 121) following *o*-stems, perhaps because of the nom. acc. pl. neut. in -uva *-uo* and the gen. pl. in **-uvom*.

Germanic. Goth. *mans* O.H.G. *man* 'men', the nom. form (§ 318 p. 218).

§ **332.** 7. *n*-stems. Pr. Idg. **k̑un-n̥s* or **k̑(u)u̯on-n̥s* 'dogs'. Skr. *śún-as*, in Veda *ukṣṇ-ás* with a variant formation *ukṣā́ṇ-as* and the like; Avest. *xšafn-ō* 'nights', *urun-ō* and *urvān-ō* 'souls', *spān-ō* (also *-a* instead of *-ō*, see § 314 p. 213). Armen. *akan-s akun-s*. Gr. *κύν-ας ἄρν-ας, τέκτον-ας ποιμέν-ας, ἀγῶν-ας πευθῆν-ας*. Lat. *carn-ēs*, *homin-ēs*, *edōn-ēs*; Umbr. *man-f* 'manus' beside Lat. *man-ceps* (see Duvau, Mém. de la Soc. de ling., VI 226). O.Ir. *con-a*

ārn-a, see § 325 p. 224. O.Icel. *ǫrn-u* 'eagles' *bjǫrn-u* 'bears' (owing to this form and to the dat. instr. pl., § 384, these nouns came to be declined as *u*-stems) beside nom. sing. O.H.G. *aro bero* (O.Icel. *Are* O.Swed. *Bjari* survive as proper names); with these we should probably compare Goth. *aúhsnuns*, since the form *auhsunns*, recorded in 1st Cor. 9. 9, seems to need emendation, see I p. 203, footnote.[1]) Lith. *szun-ìs ãkmen-is*.

Greek. Cret. *-ανς* as well as *-ας*, e. g. *καρτόν-ανς* (Att. *κρείττονας*), a re-formation caused by the existance of doublets *-ανς* and *-ᾰς* in *ā*-stems (§ 327 p. 228).

Germanic. Goth. *gumans* O.H.G. *gomon -un* are nom. forms (§ 319 p. 219).

O.C.Slav. *kamen-i* following the *i*-class (§ 330 p. 230).

§ **333.** 8. *r*-stems. Pr. Idg. **mātr-ns *dōtr-ns* or **māter-ns dōtor-ns*. Skr. *usr-ás* from *uṣár-* 'dawn', *catúr-as* m. *cátasr-as* f. 'four'; Avest. *mātar-ō dātār-ō* Gāth. *f^edr-ō* 'patres' (also *-a* instead of *-ō*, § 314 p. 213). Armen. *mar-s dster-s*. Gr. *μητέρ-ας*, Hom. *θύγατρ-ας* and *θυγατέρ-ας*, Hom. Att. *ἄνδρας* beside Hom. *ἀνέρ-ας*; *δώτορ-ας*, *δοτῆρ-ας*. Lat. *mātr-ēs*, *datōr-ēs*; Umbr. *ner-f* '*ἄνδρας*, proceres' (cp. *man-f* § 332). O.Ir. *aithr^ea*, § 325 p. 224. Goth. *brōþr--uns* 'fratres', *vintr-uns* 'winters' (declined as a *u*-stem), and perhaps A.S. *brōðr-u wintr-u* (beside *brōðor winter*); cp. nom. Norse. Run. *dohtr-iʀ* § 320 p. 220. Lith. *móter-is* (dial.), *kẽtur-is* 'four' (cp. Skr. *catúr-as* Gr. Aeol. *πίσυρ-ας*), *dur-ìs* 'door' (cp. gen. *dùr-ū* § 351, anp Skr. acc. *dúr-as dur-ás*).

Aryan. In pr. Aryan the analogy of stems in *-o-*, *-i-*, and *-u-* caused the ending **-ṝnš* to be used with *r*-stems, Skr. *-ṝr -ṝn* and Avest. *-eraš* (monosyllabic), whose pro-

1) If we read *aúhsuns* (cp. Bernhardt Vulfila p. LVII, Braune Got. Gr.[3] § 80 Anm. 1, § 108 Anm. 1), this must be regarded as a re-formate following a form **uhsum* = *uksn-mi* (see § 384). But even though this instrumental formation must once have existed, it can hardly have lasted out the pr. Germ. period, but it will doubtless have given way to a new one with *-n-* inserted; see *loc. cit.*

nunciation cannot be exactly defined (cp. Bartholomae, Kuhn's Zeitschr. XXIX 483): Skr. *pitr̥n*, *nr̥n*, Avest. *māteraṇš neraṇš* (cp. Jackson, Amer. Journ. of Phil., X 346 f.). Skr. has *-r̥š* for the fem., *mātr̥š*, like *-īš -ūš*. See § 330 Rem. p. 231.

pitaras, found in the Mahā-Bhārata (12924) is a reformate due to the likeness of nom. and acc. pl. in other stems.

Greek. Cret. *θυγατέρ-ανς* like *καρτόν-ανς*, § 332 p. 233.

West-Germanic. O.H.G. *muoter faterā -a* and the like, O.Sax. *wintar* A.S. *winter* etc., are nom., see § 320 pp. 220 f.

Balto-Slavonic. High Lith. *móteres* following *ī- i̯ē-*stems; and so too we have in the dialects nom. pl. *móter-ės* (beside *móter-s*), instr. sing. *móter-e* (beside *moter-imì*), and the like. O.C.Sl. *materi* follows *i*-stems, § 330 p. 230.

§ **334.** 9. Stems ending in an Explosive.

Pr. Idg. **bhr̥ĝhn̥t-n̥s* or **bhr̥ĝhont-n̥s*. Skr. *br̥hat-ás*, Avest. *ber^{e}zat-ō ber^{e}zant-ō*. Gr. *φέροντ-ας* (Cret. *βαλλόντ-ανς* like *καρτόν-ανς*, § 332 p. 233). Lat. *ferent-ēs*. O.Ir. *cairt^{e}a*, see § 325. Goth. *tunþ-uns* 'dentes' (declined as a *u*-stem), Lith. *dant-ìs* (cp. gen. *dant-ū*). — Lith. *vežanczius* O.C.Sl. *vezaštę* following the *i̯o*-declension (§ 326).

Skr. *šarád-as* 'autumns'. Gr. *φυγάδ-ας*. Lat. *lapid-ēs*, Umbr. *capif* kapi 'capides' for **capid-f*, like *man-f* (§ 332 p. 232). Mid.Ir. *druide* (*-e* = *-^{e}a*), see § 325 p. 224. Skr. *pad-ás* Avest. *pad-ō* Gr. *πόδ-ας* Lat. *ped-ēs* Goth. *fōt-uns* 'feet' (II § 160 p. 480).

Skr. *uśíj-as* pl. of 'desirous'. Gr. *μείραχ-ας ὄρτυγ-ας*. Lat. *bibāc-ēs frūg-ēs*, Umbr. *frif fri* 'fruges, frumenta' for **frīg-f* (*ī* = *ū*, see I § 57 p. 46), unless we follow Pauli in connecting it with Lat. *frit* and deriving it from **frit-f* (cp. II § 161 p. 488). O.Ir. *nathrach-a*, see § 325 p. 224. Skr. *vāc-as* Avest. *vac-ō vāc-ō*, Gr. **ὄπ-ας*, Lat. *vōc-ēs* (II § 160 p. 480). Skr. *rāj-as* Lat. *rēg-ēs*, O.Ir. *rīg-a* (§ 325 p. 224).

Skr. *ap-ás*, Ved. also *áp-as*, Avest. *ap-ō āp-ō* 'waters'. Gr. *κλῶπ-ας*. Lat. *dap-ēs*.

Avestic has also *-ā* instead of *-ō*, as *vāc-a* 'voces', see § 314 p. 213.

Germanic. Goth. *frijōnd-s* O.H.G. *friunt*, Goth. *mēnōþ-s* 'months' *reik-s* 'rulers', *baúrg-s* O.H.G. *burg* A.S. *byrȝ* are nom., see § 321 p. 222.

§ **335.** 10. *s*-stems.

Pr. Idg. **dus-menes-ṇs*: Skr. *durmanas-as*, Avest. *duš-manaŋh-ō*; Gr. Ion. *δυσμενέας* (Att. *δυσμενεῖς* is nom. in form, § 322 p. 222); Lat. *dēgener-ēs*. — Skr. *uṣás-as*. Lat. *honōr-ēs*. — Gr. *μῆν-ας* Lesb. *μῆνν-ας*, Lat. *mēns-ēs*, O.Ir. *mīs-a* (see § 325 p. 224), cp. II § 132 p. 415; Skr. *mās-ás* Avest. *måŋh-ō* 'menses', cp. II § 134 p. 425.

Pr. Idg. compar. **ōk̑is-ṇs* or **ōk̑(i)i̯os-ṇs*. Skr. *áśīyas-as*. Gr. Hom. *πλέας* (Cret. *πλίανς* like *καρτόν-ανς* § 332 p. 233) for **πληισ-ας* (II § 135 pp. 429 and 432); Att. *ἡδίους* is nom. (§ 322 p. 222). Lat. *ōciōr-ēs*. O.C.Sl. *slaždĭšę*, as if from a *i̯o*-stem (§ 326).

Pr. Idg. part. perf. act. **u̯ei̯dus-ṇs* or **u̯ei̯du̯os-ṇs*: Skr. *vidúṣ-as* Avest. *vīdуš-ō*. Lith. *mìrus-ius* O.C.Sl. *mĭrŭšę* following the *i̯o*-class (§ 326). As to Gr. *εἰδότ-ας* see II § 136 p. 440.

Pr. Idg. **mūs-ṇs* 'mures': Skr. *mūṣ-as*, inferred from nom. *mū́ṣ-as*, Lat. *mūr-ēs*. Gr. *μῦας μῦς*, a re-formate following *ὀφρῦας ὀφρῦς* (§ 329 p. 230). A.S. *mȳs* O.C.Sl. *mȳs-s* are nom. (§ 322 p. 223).

§ **336.** 11. Certain Root Nouns.

Pr. Idg. **nāu̯-ṇs* 'naves': Skr. *nāv-as*, Gr. Hom. *νῆας* Herod. *νέας* (Att. *ναῦς* a re-formate like *ναῦν*, § 221 p. 98), Lat. *nāv-ēs*.

Gr. Hom. *βό-ας*, Lat. *bov-ēs*; in Skr., the regular form is *gás*, beside which occur *gávas* in the Rig-Veda (the text has *gás*, which will not scan), and *gāv-as* in the Tāittirīya Brāhmana. I hold it probable that Skr. *gás* Avest. *gå* and

Gr. *βῶς* (Theocr.) do not represent an Idg. **gōs*, but are reformates in these languages following the acc. sing. (Skr. *gā́m* etc., § 221 p. 98), like Att. *βοῦς* following *βοῦν*: and this in spite of W. Schulze, Kuhn's Zeitschr. XXVII 429, and Meringer, Zeitschr. für öst. Gymn., 1889, p. 1019; compare the footnote on page 428 of volume II. On Mid.Ir. *bū* Thurneysen says: "If the nom. *bai* comes from **boi*, which would stand for **boṷ-es*" — see § 324 p. 223 — "*bū* = **būs* may have been formed on the analogy of **mogoṷes* : *mogūs* (*mogᵃi* : *mogu*)".

Skr. *rāy-ás* and *rā́y-as* 'goods, treasures', Avest. *rāy-ō*; also Skr. *rās* following *rā́m*; Lat. *rēs* for **rē(i̯)-ēs -ens*?

Nominative and Accusative Plural Neuter.[1])

§ **337.** The ending as shown in consonant stems is *-ə* = Skr. *-i* Gr. *-α* (I § 110 p. 105, Morph. Unt. V 52 ff.) The Idg. endings *-ī* and *-ū* (*i*- and *u*-stems) might also be analysed into *-i+ə* and *-u+ə*.

The *o*-stem ending *-ā* is identified, rightly in all probability, with *-ā* in the nom. sing. fem.[2]); then such a word as **jugā* (= Lat. *juga*) would originally mean, if we may coin a word, 'yokedom' or something of the sort. Compare II § 158 pp. 473 ff. In favour of this view much evidence may be adduced; for example, the use of the singular of the predicative verb with a nom. pl. neuter as subject, an idiom which is as old as the parent language: e. g. R.-V. I 162 8

1) L. Havet, La désinence des pluriels neutres, Mém. de la Soc. de lingu. IV 275 f. V. Henry, Le nominatif-accusatif pluriel neutre dans les langues indo-europ., Le Muséon VI 558 ff. J. Schmidt, Die Pluralbildungen der idg. Neutra, 1889. The Author, Zur Bildung des nom. acc. plur. neutr., Morphol. Unters. V 52 ff. Bartholomae, Zur Bildung des nom.-acc. plur. der *as*-Stämme, Ar. Forsch. II 105 ff. W. Meyer, Die Schicksale des lat. Neutrums im Roman., 1883.

2) In addition to J. Schmidt, Pluralb. p. 10 footnote 1, see Windisch, Curtius' Stud. II 265; de Saussure, Mém. sur le syst. prim., p. 92; Johansson, Kuhn's Zeitschr. XXX 400; und Hanssen, Commentationes in honorem Guilelmi Studemund, 1889 pp. 116 f.

sárvā tá . . . astu 'omnia haec sunto', Hom. ι 438 ἐξέσσυτο ἄρσενα μῆλα. If the *o*-class got its neuter plural thus from stems in *-ā-*, it would be possible that the *i*-class got its neuter plural with the ending *-ī* from the nominative singular of *ī- i̯ē-*stems (II § 109 p. 332).

Before the use of this form as a plural case, which was soon followed by a re-formation of the gen. into **jugōm* 'iugorum', and the loc. into **jugoi̯s(u)* 'jugis', and so forth, there must have been a real neuter plural having *-ə* in the nominative and accusative.

In consonant stems, along with the forms in *-ə*, there is used the bare stem, with a formative suffix of the 3rd. or 4th. strong grade as its case-sign, e. g. **dhēmōn* = Avest. *dāmaṇ* from the stem **dhēmen-*. This **dhēmōn* in formation resembles a nom.-acc. neuter singular of which we have an example in Goth. *namō* 'nomen' for **-mōn* (§ 223 p. 100), and the nom. sing. masc. fem. Gr. τέρμων Goth. *tuggō* and the like (§ 192 p. 70). Hence J. Schmidt assumes that this neuter plural series, like the last, was once a series of feminine collective nouns.

It is a fair conjecture that *-ə* at first belonged to some one group of consonant stems, and that it afterwards spread to others. Between Avest. *dāmaṇ* and Skr. *dhámān-i* Avest. *ašaon-i* there was, we may suppose, much the same relation as between certain variant forms of the locative singular, Skr. *mūrdhán* and *mūrdhán-i mūrdhn-í* (§ 256 pp. 156 ff.); and in the parent language there will have been not only *-ōn* (*-ēn*) and *-ōn-ə* (*-ēn-ə*) but also forms with a weak grade of stem.

§ **338.** 1. *o*-stems. Pr. Idg. **jugā* 'iuga', cp. § 337. Skr. Ved. *yugā́*; Avest. *xšaϑra* O.Pers. *hamaranā* 'battles'. Lat. *juga*; Umbr. veskla vesklu 'vascula' supa *sopo* 'supina' Osc. teremenniú 'termina' *comono* 'comitia' (I § 105 pp. 98 f.). O.Ir. *trī chēt* '300' = Ved. *trī́ śatā́*, *trāth* 'hours' *nert* 'powers' and the like, cp. next page; Gall. perhaps καντενα. Goth. *juka*, *þō* 'the, those' (I § 659. 1 p. 512, § 660. 2 p. 515);

O.H.G. *wort* 'verba', whence *joh* instead of **johhu* (*-u* retained in *cunniu cunnu* 'families', especially in East Frankish, beside *cunni*), O.Sax. A.S. *fatu* 'casks' (I § 661 p. 518). Lith. *keturió-lika* '14' *penkió-lika* '15' (§ 175 p. 28), Pruss. *slayo* 'sleighs' from sing. *slaya-n* 'sleigh, sledge' *warto* 'door' (*-o* = *-ā* as in the nom. sing. fem. e. g. *mergo* = Lith. *mergà* 'girl'); O.C.Sl. *iga*.

Aryan. A Sanskrit variant ending is *-āni*, *yugáni*, found in Vedic, and exclusively used in the post-Vedic language. It is a re-formation following *nā́mān-i* 'nomina'. So too Avest. Gāth. *vīspēŋg* (*vīspa-* 'all') *yąn yąm* (*ya-*, pronoun) have for their model **-ān*, the *n*-stem ending, as *haxmēŋg nāmąn -ąm* (§ 340); the same re-formation is said to be found in Vedic Sanskrit, e. g. *tápūṣi pataŋgā́n* 'winged flames' R. V. IV 4 2 (Ludwig, Rig-Veda IV 313; Bartholomae, Ar. Forsch. II 157, Stud. zur idg. Spr. I 73). The point of contact which was the beginning of these changes is the similar ending of the plural, Skr. Ved. *nā́mā* Avest. *nāma* (§ 340) and Skr. Ved. *yugā́* Avest. *xšaϑra*.

Another termination found in Avestic is *-å*, the ending of *es*-stems (§ 342), as *vispå*. There are also forms in *-āiš*, as *vīspāiš*, which like *nāmēnīš* (§ 340) seem to be really instrumental (§§ 379, 380), although it has not yet been made clear how they came to be used for the nominative (cp. Bartholomae, Stud. I 75).

Greek. *-ᾰ*, *ζυγά*, follows consonantal stems. It is very unsafe to say that *-ᾱ* has been kept in adverbs like *κρυφῇ* Dor. *κρυφᾷ*; see § 274 Rem. p. 174. But I conjecture that we have a real instance of *-ᾱ* in *ἐπί-τηδε-ς* 'just for this, on purpose' (Buttmann compared the word with *ἐπὶ τάδε*, Lexil. I 46). Another piece of evidence for the old ending *-ᾱ* is found in phrases like *ἀδύνατά ἐστι* 'it is impossible'; see J. Schmidt, Pluralb. 32 ff., and § 158 of the vol. II of the present work, pp. 473 ff.

In Old Irish the usual ending is *-a*, as *dligeda*, which is explained very reasonably by Windisch (Paul-Braune's Beitr.

IV 214 f. and 231) as a re-formation following the nom. and acc. plural of *ā*-stems (§ 315 p. 215, § 327 p. 229); we must follow Thurneysen in looking for the point of contact in the article, where *inna* represents both **sen-dās* and **sen-dā* (§ 428).

Lithuanian. Besides the forms already given, *piktà* in *taĩ piktà* 'haec mala (sunt)' and the like may belong to this place. The plural form must necessarily have run into one with the singular (Idg. **-o-d*).

§ **339.** 2. *i*- and *u*-stems. Pr. Idg. **trī* 'tria', **medhū* 'sweetnesses, sweet things', cp. § 337. Skr. Ved. *trī́*, *śúcī* 'splendida, pura', *mádhū*, *purū́* 'multa'; Avest. *hu-baođi* 'bene olentia', *cī* 'quae' in *cī-ca*, *pouru* 'multa', Gāth. *vohū* 'bona'. Lat. *trī(-gintā)*. O.Ir. *trī tri*; and perhaps *mind* 'insignia', *rind* 'constellations', see below. Lith. *trý-lika* '13' (cp. *keturió-lika* § 338); O.C.Sl. *tri*, and doubtless *si* 'haec' from nom. sing. masc. *sĭ*.

Aryan. A Sanskrit variant is *-īni -ūni*, *trī́ṇi śúcīni*, *mádhūni purū́ṇi*, found in Vedic and exclusively used in later Sanskrit; compare *-āni* § 338. In the Avesta we might expect to find forms in **-īn *-ūn*, **-ī̯ *-u̯*, parallel to *vīspēŋg* (§ 338); and since the Avestic language had no means of writing nasalised *i*- and *u*-vowels, it is quite possible that such forms are really there, though disguised by being written with *-ĭ̄* and *-ŭ̄* (Bartholomae, Stud. I 73 f.).

In Greek there are re-formations with the suffix *-ᾰ*: *τρία*, *ἴδρια*; Hom. *γοῦνα* Lesb. *γόννα* for **γονϝ-α* Hom. Att. *ἡδέα*, Att. *ἄστη ἡμίση* (for the contraction see Wackernagel, Kuhn's Zeitschr. XXV 272).

Italic. Re-formations with the *o*-stem ending; Lat. *tria maria*, *genua cornua*; Umbr. triia 'tria' triiu-per *trio-per* 'ter', berva 'verua' vatuva vatuvu *vatuo* (meaning unknown).

In Old Irish **-i̯ā -e* (cp. the Italic) was perhaps the regular ending of substantives, *mure* 'maria'.

Remark. "Three formations are found. (1) Without any termination, *mind rind* (the latter was perhaps originally a neuter *u*-stem, to judge from *rendaib*). (2) With *-e*: *mure*. (3) With *-a* (esp. in Mid.Ir.): *mora*, *renna*. It is unfortunate that all three agree with some plural form of the two chief neuter classes, the *o*- and *s*-stems. The ending *-a* is certainly due to the analogy of the *o*-class, and *mora* is a direct imitation of *dligeda*. *mind* may represent an old form with *-ī*, like *trī*; but it may equally well be an ad-formate of *o*-stems, cp. *dliged* beside the later *dligeda*. *-e* may be either **-ia* or **-iā*, and also a re-formation following the *s*-class (§ 343). I should prefer to regard *-e* as the genuine ending of neuter *i*-stems". Thurneysen.

Adjectives have dropped the neuter form altogether; for the nom. acc. the masc.-fem. form is used, e. g. *mathi* (*maith* 'good').

Germanic. Goth. *þrija* O.H.G. *driu* follows the *o*-class (§ 338). Of the same kind is perhaps Goth. *kniv-a* O.H.G. *kneo* 'knees' (J. Schmidt, Plur. 49). O.H.G. *fihiu* 'pecora', if there was such a word (see Braune, Ahd. Gr. p. 171), admits of different explanations.

§ 340. 3. *n*-stems, cp. § 337.

a. *-ōn* (*-ēn*): Avest. *dāmąn nāmąn*, *haxmēnəg* (*haxman-* 'friendship'). In Sanskrit, such a form as *pataəgán* would be indirect evidence for pr. Ar. *-ān*; see § 338 p. 238.

Ved. *dhā́mā nā́mā*, Avest. *dąma* show a pr. Ar. *-mā*, whether from Idg. **-mō* (**-mē*) or Idg. **-mū̯* (cp. **quetu̯ī̯-* 'four' in § 341) is a doubtful matter; if from Idg. **-mō* (**-mē*), then pr. Ar. **dhāmā* : **dhāmān* as Lat. *termō*: Gr. *τέρμων*. See § 223 pp. 101 f.

Remark 1. O.H.G. *herza* and *auga* (§ 223 p. 100) are used now and then for the plural. The plural use of these words is certainly not old, but, as in the case of *feho*, arose because singular and plural had run into one in the *o*-class, e. g. *wort*.

b. *-n-ə* *-ōn-ə* (*-ēn-ə*) remain only in Sanskrit and Germanic: Skr. *dhā́mān-i* *áhān-i*, Goth. *haírtōn-a* O.H.G. Upper-G. *herzon* 'hearts' (O.H.G. Frank. *herzun*, cp. Streitberg, Paul-Braune's Beitr. XIV 218 ff.) with the *o*-stem ending taken in place of *ă* = Idg. *-ə*. Weaker forms of

stem are seen in Avest. *nāmēn-ī* (*ē* = Ar. *a*, see I § 94 Rem. p. 89, and Bartholomae Stud. zur idg. Spr. I 76 f.) *ašaon-i* 'sacra, pia', Gr. *πίον-α ἄρρεν-α*, and with the *-ā* of *o*-stems Avest. *daęman-a* 'eyes' (like *manaəh-a* § 343), Lat. *nōmin-a*, Goth. *namn-a* O.H.G. Upper-G. *herzon* O.C.Sl. *imen-a*.

O.Ir. *anmann* 'nomina' may have lost *-ă* = Idg. *-ə*, or *-ā*, the *o*-stem ending; but its double *n*, which recals that of *goba* 'father' gen. *gobann* (Gall. *Gobannitio*, Old British place-name *Gobannium*), has not yet been explained.

Remark 2. Thurneysen throws out the question whether *gobann-* was not originally **gobamn-* and the nom. *goba* modelled upon it; and whether *anmann-* may not be a transformation of **anann-* = **anamn-*, *m* having been restored to it. Compare Skr. *bhūmnā* instead of *bhūnā́*, Gr. *ἀρνάσι* instead of **ἀρασι* and the like (II § 117 Rem. 1 p. 366, III § 361, Streitberg, Paul-Braune's Beitr. XIV 205 f.).

Avest. *nāmēnīš* is the instr. form, like *vīspāiš* (§ 338), see § 379.

§ 341. 4. *r*-stems. **qetu̯ōr-ə* '*τέτταρα*' may be the form from which come Skr. *catvā́r-i* Lat. *quattuor* Goth. *fidvōr*, but the last two may come from **qetu̯ōr*, cp. § 168 pp. 10 and 11; perhaps we should add to this list Osc. *petora* (quantity of *o* unknown). Weaker forms of the stem are seen in Gr. Dor. *τέτορ-α* Ion. *τέσσερ-α* Att. *τέτταρ-α* Boeot. *πέτταρ-α* Lesb. *πίσυρ-α*, Osc. *petiro-pert* (*petiru-pert*); this Osc. word has the *o*-stem ending. O.Ir. *cethir* is doubtless the masc. form; the word which follows suffers "aspiration" (*cethir chēt* '400') after the fashion of real neuter forms, as *trī chēt* etc. (compare the feminine gender marked by "aspiration" after the nom. sing. of fem. *i*-stems, e. g. *sūil chairech* 'oculus ovis', following the rule of *ā*-stems). It is also conceivable that the neuter *trī* caused **qetrī* to be coined, and that from this comes *cethir*.

Idg. **qetu̯ī-* is represented in Gr. Dor. *τετρώ-κοντα* 'forty' etc., see § 176 p. 29 and § 178 pp. 35 ff.

A Sanskrit re-formation, following *-āni -ini -ūni*, is *-ī̯ṇi*,

e. g. *bhartṛ́ṇi* from *bhartár-* 'upholder, upholding'. Compare § 224 *a* pp. 102 f.

§ **342.** 5. Stems ending in an Explosive.

a. *nt*-stems.

(*α*) *-nt*: Avest. *mīždavąn* pl. 'possessed of reward' *afsmanivą* pl. 'containing verses', *-ąn -ą* = pr. Ar. **-ān(t)*. Perhaps another example is Lith. *vežą̃*, which is used for the nom. pl. masc., see § 321 p. 221; it should be remembered that, according to I § 615 p. 465, Idg. **-ōnt* and **-ŏnt* would necessarily run into one if the practice of shortening vowels is older than the loss of the *-t*.

(*β*) *-nt-ə*. Skr. R.-V. *ghṛtávānt-i* ('fatty') *sā́nti* ('being'), in later portions of the Vedas and in the post-Vedic language *ghṛtávant-i sánt-i bṛhánt-i*, post-Vedic *dádant-i* beside *dádat-i* ('giving'). Gr. *χαρίεντ-α φέροντ-α*. Lat. *silent-a* with the ending of *o*-stems, *ferent-ia* following the *i*-class, like *ferentium* § 352. O.C.Sl. *vezą̄šta* as though from a *i̯o*-stem.

The Aryan endings *-ānt -ānt-i* may have lengthened the vowel on the analogy of *-ān -ān-i* and *-ās -ās-i*. We may provisionally regard this lengthening as derived from the parent language, and in that case *sā́nti* may be regarded as = **sṇ̄́ti*. Compare **qetu̯r̥̄- *peəqē-* following **trī* 'tria', § 176 p. 29.

Avest. *savaŋhaitiš* ('useful') *sarascantīš* ('trickling') like *nāmēnīš* § 340 p. 241, § 379.

b. Skr. *praty-áñc-i* 'retroversa'. Avest. *ast-i* 'ossa'. From the time of the Brāhmanas we meet with Sanskrit forms with a nasal in the penult, where there should have strictly been none, as *tri-vṛ́nti* from *tri-vṛ́t-* 'threefold', *-hunti* from *-hut-* 'offering', *-bhāñji* from *-bhāj-* 'sharing, having a share', *hṛ́ndi* from *hṛ́d-* 'heart'. The same thing is seen in *s*-stems, and here even the Rig-Veda has it: *mánā̯si havī̯ṣi áyū̯ṣi* (§ 343). The nasal first appeared in *nt*-stems, which had the ending *-nti*, and in *ā́śīyā̯si* and *vidvā́si*, although even here it was not earlier than the proethnic period of Sanskrit (II § 135

p. 430, § 136 p. 441). From these it spread by analogy (perhaps even in *dádanti* the *n* is due to a similar cause), and produced a feeling that there was some natural connexion between *-i* and a preceding nasal. Last of all, it came about that no *-i* was to be found at all without a nasal (compare *-āni -īni -ūni -ṝṇi*), with the single exception of *catvári*. In considering the intrusion of a nasal into **manāsi* it must be remembered that this alone of all cases of the word had its suffix in the form *-ās*.

Remark. A new explanation of the nasal in *mánāṣi* is given by J. Schmidt, Pluralb. 155 ff., 236. It is very far-fetched indeed, and is anything but convincing.

Gr. *πένητ-α*, *φυγάδ-α*, *ἅρπαγ-α*.

Lat. *capit-a cord-a* with the *-a* (= **-ā*) of *o*-stems, adjectives *teret-ia discord-ia audāc-ia victrīc-ia* following the *i*-class.

§ **343.** 6. *s*-stems.

a. **-ōs* (**-ēs*): Avest. *manå* from *manah-* 'thought, mind'. Perhaps A.S. *lombor -ur* 'lambs' *calfur* 'calves', see J. Schmidt Plur. 149 ff.

b. **-ōs-ə*, quite regularly changed in a unique Gāthic form, Y. 32. 14, *var*ᵉ*cāhī(-cā)* (cp. Skr. *várcāṣi*), according to Bartholomae's happy conjecture (Ar. Forsch. II 105 ff.). There is a nasal due to analogy in Skr. *mánāṣi*; and the nasal is also analogical in the comparative *áśīyāṣi* and participle *vidvāṣi*, although here it is not restricted to the neuter plural (see § 342). Gr. *ἡδ-ίω* for **-ιω(σ)-α*, notwithstanding *ἡδ-ίους* = **-ιο(σ)-ες*? And is there a genuine proethnic *-iōs-* in Lat. *ōciōr-a* (*-a* from the *o*-stems)? Weaker stems are seen in Gr. Ion. *μένε-α* Att. *μένη* and (with the *-ā* of *o*-stems) Avest. *-anəh-a* (i. e. **-as-ā*), as *manaəh-a* (like *daęman-a* § 340 p. 241), Lat. *gener-a*, Goth. *agis-a* '*φόβοι*' O.H.G. *kelbir* (A.S. *cealfru*) 'calves'[1]) (these Germanic words likewise form the rest of their cases after the *o*-type, cp. Lat. *holerōrum* from *holer-a*, and the like),

1) O.H.G. *kelbir* for **kálbìru*, A.S. *cealfru* for **kálborù*.

O.C.Sl. *sloves-a*. Whether O.Ir. *tige* comes from **(s)teges-ə* or **(s)teges-ā* cannot be made out.

Skr. *havíṣi* from *havíṣ-* 'libation', *áyuṣi* from *áyuṣ-* 'life-power'. Gr. Hom. *τέρα-α* Att. *τέρᾱ*.

Genitive Plural.[1])

§ **344.** The suffix of this case was probably **-ŏm*. To this view, which I share with Osthoff and others, I shall adhere until some tenable hypothesis has been found on which *-ŭ* in O.C.Sl. *mater-ŭ sloves-ŭ* etc. may be regarded as naturally representing Idg. **-ōm*. The question of the origin of this assumed **-ŏm* may be left alone (see Leskien, Ber. der sächs. Ges. der Wiss., 1884, p. 104).

-ŏm was contracted with the stem-final of the *o*-class into *-ōm* or *-ēm* according as that was *-o-* or *-e-* (cp. § 240 p. 133). These two forms are kept distinct in Germanic;[2]) elsewhere *-ōm* has become the only ending. In Aryan, Greek, Italic, Germanic, and Baltic the *o*-stem ending spreads to consonant stems and to those in *-ī-* *-iu̯-*, *-ū-* *-uu̯-*, *-i-*, and *-u-*; conversely, in Slavonic, **-ŏm* = *-ŭ* spreads to stems in *-o-*, in *-ā-*, and in *-ī-* *-i̯ē-*. With the adoption of *-ŭ* as the regular ending in Slavonic compare the universal use in Greek of *-ᾰ* in the nom. acc. pl. neuter (§§ 337 ff.). The spread of *-ōm* (*-ēm*) may have begun in the parent language; and varieties

1) Schleicher, *-s-ām-s*, Suffix des gen. plur. in der idg. Ursprache, Kuhn's Zeitschr. XI 319 f. Osthoff, Die Bildung des gen. plur. im Idg., Morph. Unters. I 207 ff. Bezzenberger, Die Genitivendung *-nām*, in his Beitr. II 130 ff. Osthoff, Über den gen. plur. der *ā*-Declin., Morph. Unters. II 111 ff. Bartholomae, Zu den ai. gen. plur. auf *-ān*, *-īn*, *-ūn*, *-r̥n*, Stud. z. idg. Sprachg. I 117 ff. Bréal, Le génitif pluriel en latin, Mélanges Renier, 1887, p. 234. Förstemann, Zur Gesch. altdeutscher Declination: der gen. plur., Kuhn's Zeitschr. XV 161 ff. (with additional matter by Petters, *ibid.* XVI 385 ff.). Osthoff, Der gen. plur. im German., Morph. Unters. I 232 ff. Möhl, Histoire du gén. plur. en serbe, Mém. de la Soc. de lingu. VI 187 ff.

2) Deecke (Bezz. Beitr. XII 340) says that Lyc. *-he* answers to Goth. *-zē* in *i-zē*.

of dialect during the same period may have had something to do with the fact that *-ŏm* held its ground so firmly in Balto-Slavonic that afterwards, when Slavonic had begun its independent course, it is found without a rival.

Italic and Keltic have little importance in this controversy. Pr. Lat. *-ŏm* pr. Ir. **-ŏn* may quite well have come from either Idg. **-ōm* or Idg. **-ŏm*; for both languages shortened a long vowel before *-m* in prehistoric times. Again, in Umbro-Samnitic and Gallic *-om* the quantity of *o* is unknown. It is possible, then, that Slavonic *-ŭ* = Idg. **-ŏm* does not stand alone.

The proethnic ending of *ā-* and *ī-* *i̯ē*-stems cannot be made out with any certainty. Osthoff (Morph. Unt. II 126) conjectures *-ām* in both classes. In any case, both will have had *-m* as the final sound, as all other stems had.

Now as regards the distribution of *-ōm* and *-ēm* in Germanic, it appears that in proethnic Germanic only *o*-stems showed both endings, while all other stems had *-ōm* alone. In North and West Germanic *-ēm* gave way, only a few traces being left of it (see § 345); while in Gothic *-ēm* became the regular ending for *o*-stems, and furthermore found its way into other stems as well, e. g. *gastē* m. *anstē* f. (*i*-stems), *reik-ē* m. *baúrg-ē* f., *suniv-ē* m., *guman-ē* m. etc.; *-ō* = **-ōm* in Gothic was retained only for certain feminine classes, e. g. *gibō sibjō frijōndjō tuggōn-ō.*

The Armenian ending *-ç* (gen., loc., dat., and abl.) has not been properly explained: examples are *gailoç*, *srtiç*, *zarduç*, *akanç*, *març*, *asterç* and *dsteraç*. Bugge (Beitr. zur etym. Erl. der armen. Spr., 47 f.) conjectures that *-ç* represents the Idg. locative ending *-si* with the postposition *en*, — thus *srtiç* = *-i-si̯* + *en*. But if that were so the nasal of *-en* must have been kept; so it is preferable to compare Lith. *-e* (as *rañkoj-e rañkos-e*, § 264 pp. 167 f.) or Ar. *-ā* (Avest. loc. pl. in *-hv-ā*, § 356).

Consonant stems that admitted of gradation, as **pəter-* 'pater', had their weak form in this case from the parent language onwards.

§ **345.** 1. *o*-stems. Pr. Idg. **u̯ĺ̥qōm* 'luporum', **jug̯ḗm* 'iugorum', cp. § 240 pp. 133 f. In Aryan comparatively few instances remain (cp. Hanusz, Sitzungsb. der Wiener Ak. 1885 pp. 7 f.; Bartholomae, Stud. zur idg. Spr. I 47 f., 97, 117 ff.): Skr. Ved. *vṛ́kām*, *dēvā́m* 'deorum'; Avest. *vehrkąm*. Gr. *λύκων*; on Dor. *φιλῶν* (Att. *φίλων*) see the Author, Gr. Gr.[2] p. 126. In Latin, *-om -um*, but comparatively rare: *deum*, *fabrum*, *modium*, inscr. *Romanom*; Umbr. pihaklu 'piaculorum' *proseseto* 'prosectorum', Osc. Núvlanúm 'Nolanorum', Volsc. *Velestrom* 'Veliternorum'; it is not certain that the ending *-om* in the Italic languages was Idg. **-ōm*, see § 344. O.Ir. *fer n-*, *cēle n-* 'sociorum' for **-ii̯om* (cp. I § 139 pp. 124 f.), Ogam inscr. *maqa* (before *Mailagni*) 'filiorum'; it is not certain that the Keltic ending **-om* is Idg. **-ōm*, see § 344. Goth. *vulfē*, *haírdjē* 'of herdsmen' with **-ēm*, O.H.G. *wolfo hirteo*, also O.Sax. *-o* A.S. *-a* O.Icel. *-a* for **-ōm*; **-ēm* is still seen in West-Germ. in O.Sax. *kinda*, *Hrodbertinga* and the like (Kögel, Paul-Braune's Beitr., XIV 114) and in O.Sax. *ūsa* O.Fris. *ūse* 'of us', and also according to Kögel, *loc. cit.*, in place-names which end with *-inga* etc., where it was no longer regarded as a genitive. Lith. *vilkũ* (I § 92 p. 86).

Aryan. Usually *-ānām*: Skr. *vṛ́kāṇām dēvā́nām*, the sole ending in post-Vedic language; Avest. *vehrkanąm* (a shortening of *-ā* in the penult is indicated by the dissyllabic form *γᵉnąnąm* i. e. *γᵉną̄ną̄m* 'of murderers') [1]), O.Pers. *bagānām* 'deorum'. The same ending, borrowed from *n*-stems, is shown by those in *-ā-* (§ 346), and it seems that these are the stems which first used the formation in Aryan, perhaps to distinguish the gen. plural from the acc. singular. The forms **ātma-bhiš* **ātma-bhi̯as* **ātma-su* made it natural to analyse **ātmanām* into **ātma-nām*; on which type were moulded such genitives as **sai̯nā-nām* (Skr. *sḗnānām*) instead of **sai̯nām* in connexion with **sai̯nā-bhiš* etc. This view (cp. Hanusz as cited, p. 11)

1) This shortening may be compared with that in *å̄ŋhanąm* acc. sing. fem. from *å̄ŋhāna-*, *dātarem-ca* beside *dātārem*, and the like.

is supported by the following genitives which belong to the special Sanskrit period: *bhrū-ṇā́m* beside *bhrū-bhíš*, *gṓ-nām* beside *gṓ-bhiš*, *nr̥-ṇā́m catasr̥-ṇā́m* beside *nŕ̥-bhiṣ catasŕ̥-bhiš*, *catur-ṇā́m* beside *catúr-bhiṣ*, *ṣaṇṇā́m* = **ṣaḍ-ṇā́m* beside *ṣaḍbhíṣ*; and it is also supported by the similar re-formation in West-Germanic: (O.H.G.) *gebō-no* (Goth. *gibō*) beside *gibō-m* following *zungōn-o* beside *zungōm* (§ 346). Compare further § 229 Rem. 1 p. 115.

Italic. In Latin the common form from the earliest times has been *-ōrum*, as *lupōrum*, *istōrum*, *C. I. L.* no. 32 *duonoro* = *bonōrum*, a re-formation following *-ārum* (§ 346). Osc. Safinim 'Safinorum, Samnitium' *Aisernim* 'Aeserniorum' (but Kluvatiium 'Cluatiorum'), a re-formation following the nom. and acc. sing. with *ĭ*, see II § 63 p. 122, III § 194 p. 74, § 212 p. 90, and Streitberg in Paul-Br. Beitr. XIV 189, 198; cp. below, O.C.Sl. *krajĭ*.

Balto-Slavonic. O.C.Sl. *vlŭkŭ* follows the analogy of consonant stems, see § 344. Instead of *krajĭ* we should have expected **kraje*, to represent Idg. *-i̯ŏm (cp. § 227 pp. 110 f.). Either *-ŭ* was borrowed from *vlŭkŭ*, and then **krajŭ* became *krajĭ*, or else perhaps the ending was *-*im*, a re-formation following the nom. acc. sing. *krajĭ* with original *-*is* *-*im* (§ 194 pp. 74 f., § 212 p. 90), cp. Osc. Safinim above. If the second alternative is true, *pątĭjĭ* must have borrowed its *-ĭ* from *krajĭ*, in order to distinguish the genitive from the nom. *pątĭje*. — For the sake of clearness *-ovŭ*, the *u*-stem ending (§ 349), was adopted in most of the Slavonic languages in place of the *-ŭ* in *o*-stems; and *-ovŭ* afterwards spread over most other stems, to all of them in Lower Sorbian.

Remark. Lett. *tõ* '*τῶν*' (*õ* = *ů* with the *gedehnt* or drawled accent) makes it necessary to ask whether the law laid down in I § 92 p. 86, stating that *-*ōm* became *-*ūm*, held good only for words of more than one syllable. It is also possible to assume that *õ* (*ů*) was borrowed from the accusative (*tõs*) and the locative (*tůs*), precisely as the analogy of *schi-s* and the like gave rise to a form *schim* beside *scham* 'huic' (Lith. *sziám*). The latter supposition has more in its favour.

§ **346.** 2. *ā*-stems. The proethnic ending is uncertain; see § 344 p. 245.

Pr. Aryan *-ām* is perhaps preserved in a few Avestic genitives, as *vanąm* 'of trees' (and compare the pronoun *kąm*). *-ānām* was in existence in proethnic Aryan: Skr. *áśvānām*; Avest. *haęnanąm* (for **-ānām*), O.Pers. *parūvzanānām* ('populous', gen. pl.). As regards the origin of this ending, see § 345, page 246.

Gr. **-ā(σ)ων*, following the pronominal declension (Hom. *τάων* = Skr. *tásām* § 429). Hom. *θεάων*, Boeot. *δραχμάων*, Thess. *-άονν* and *-ᾶν*, Dor. Lesb. *-ᾶν*, Ion. *-έων* Att. *-ῶν*. Att. adj. *φίλων* instead of *φιλῶν* (Ion. *φιλέων* Dor. *φιλᾶν*) by analogy of the masc. *φίλων*, cp. fem. *τούτων* in contrast with Dor. Lesb. *ταυτᾶν*.

Italic has the same re-formation: Lat. *equārum*; Umbr. hapinaru (meaning uncertain) *pracatarum* 'munitarum', Osc. *egmazum* 'rerum'. Lat. masculines like *agricolum omnigenum* in the poets perhaps have not really the ending which gave place to *-ārum*, but are re-formates, suggested by *Gangaridum Aeneadum* and so forth.

O.Ir. *tuath n-*, *ban n-*, *soillse n-*, cp. *fer n- cēle n-* (§ 345).

Goth. *gibō*, A.S. *ȝiefa*; in O.H.G. we only find in Otfrid a few instances of *-o*, as *āleibo* 'of remnants'. West-Germanic shows a re-formation on the lines of *n*-stems, O.H.G. *gebōno* O.Sax. *gebono* A.S. *ȝiefena*, caused by the likeness of the dat. *gebōm* O.Sax. *gebon* A.S. *ȝiefum* to *zungōm tungon tunȝum* (nom. pl. *zungūn* and so forth). So also A.S. *cū-na* 'of cows' beside *cū-a* (dat. *cū-m*), like Skr *gó-nām* (instr. *gó-bhiš*). Compare § 345 pp. 246 f.

Lith. *rañkū ėdžiū* (nom. pl. *ėdžios* 'rack'), O.C.Sl. *rąkŭ zmijĭ* (*zmija* 'snake'), cp. *vilkū*, *vlŭkŭ krajĭ* § 345 p. 247.

§ **347.** 3. *i-* *i̯ē*-stems (cp. p. 68 footnote 1). The proethnic ending is uncertain, most likely *-(i)i̯ōm*, compare Irish, Germanic, Balto-Slavonic.

Skr. Ved. *bṛhatīnám*, *-īnām*, Avest. *barentinąm* (the

quantity of the Avest. *i* and *u* is uncertain), an Aryan re-formation which must be connected with the parallels (Skr.) *bṛhatī́ : áśvā*, *bṛhatī́-ṣu : áśvāsu* etc., cp. §§ 345, 346. Gr. φερουσῶν Hom. μουσάων following the *i̯ā*-class (§ 346). Lat. *faciērum*, like *-ōrum* (§ 345), is due to the analogy of *-ārum*. O.Ir. *inse n-* (cp. *soillse n-* § 346). Goth. *frijōndjō*, O.H.G. *gutinnōno* (*kuninginno* is isolated), cp. the *i̯ā*-stems, Goth. *sibjō* O.H.G. *sippeōno*, § 346; perhaps we may add O.H.G. *digīno* 'of prayers' (cp. dat. instr. pl. *digī-m* § 382). Lith. *žẽmiū vežancziū*, O.C.Sl. *zemljĭ veząštĭ*, cp. *ėdžiū zmijĭ* § 346.

§ **348.** 4. *i*-stems. Pr. Idg. *-(i)i̯ŏm*, **ou̯i̯ŏm* 'ovium' **trii̯ŏm* 'trium', see § 344. Avest. *kaoyąm* for **kau̯i̯ām* (I § 160 p. 144) from *kavi-*, the name of a demon. Gr. τριῶν, ὀίων, see below. Lat. *ovium turrium trium*; Umbr. *peracrio* (meaning uncertain), Osc. *Tiiatium* 'Teatium, Teatinorum' a]íttíúm 'portionum' (gen. sing. *aeteis*). O.Ir. *fāthe n-* for **-iŏm*, Ogam inscr. *tria* (before *maqa*) 'trium'; Gall. *Brivatiom* ('pontilium' Stokes, Bezz. Beitr. XI 129). Goth. *þrij-ē* (instead of *-ō*, § 344) O.H.G. *drīo* (*ī* following *drī*), O.H.G. *gesteo -io* m., *ensteo -io* f., O.Icel. *elgja* (*elgr* 'elk'). Lith. *nakcziū*; O.C.Sl. *pątĭjĭ noštĭjĭ -ijĭ* (see § 345, page 247), but compare what is said below.

Aryan. Avest. *vay-ąm þray-ąm* (Ved. *vīnā́m trīṇā́m*) with strong stem like gen. sing. *vay-ō*, see § 231 p. 120, and compare *nar-ąm* = Ved. *nar-ā́m* § 351. Considering that Avest. *vayanąm* is a transformation of *vayąm* on the analogy of *o*-stems, we may infer from Skr. *trayāṇā́m* an older **tray-ām*[1]), and the same form is indirect evidence for **kavyām* = Avest. *kaoyąm*, and the like.

Skr. *ávīnām* Ved. *trīṇā́m* Avest. *ažinąm*, like *-ānām*, see § 345 p. 246. The first formed in pr. Aryan was perhaps

1) Similarly the Lith. gen. *trijū*, because of its agreement with the *-ū* of *o*-stems (as *keturiū*), called forth the dialectic loc. *trijū̊sè* instead of *tri-sè*.

*-*i-nām* beside *-*i-bhiš* and similar cases; and *i* was lengthened partly through the influence of *-ānām*, but partly, no doubt, through that of the nom. acc. pl. neuter (§ 339 p. 239); in considering Avest. *ažinąm*, as with *bāzunąm* (§ 349), it must be remembered that the quantity of the Avest. *i* and *u* is uncertain. In Vedic arose the further ending *-īm*, analogous to *-ām*, as *sūrī́m* from *sūrí-ṣ* 'shining', and in a similar way *-ūm* and *-ṝm* beside *-ānām* and *-ṝṇām* (§§ 349, 351), see Bartholomae in Bezz. Beitr. XV 208, and his Stud. zur idg. Spr. I 47 f., 97 ff.

Greek has *-ιων* in substantives in all dialects but Attic, as *βασίων* (*πολίων* may come from *πόλῑ-ς*, see § 354); *τριῶν* is Attic too. Att. *βάσεων ὄφεων* with *ε* from the strong stem, and with the accent of *βάσεος βάσεως*, see § 231 p. 120; compare *βάσεσι* instead of *βάσισι* (§ 360).

In Latin, *-ium* has spread widely amongst consonant stems, particularly *nt*-participles (see below). The resulting pairs of forms, and an uncertainty as to certain other stems, reaching back to the pre-Italic period, by which we have (say) *civatāt-um* along with *civitāt-ium* (II § 102 p. 310), combined to produce a few instances of *-um* in original *i*-stems, which ought to have *-ium*; e. g. *apum vātum* beside *api-um vāti-um*. *-iōrum*, instead of *-ium*, in neuter genitives like *vectīgāliōrum ancīliōrum* was called forth by *-ia* in the nom. acc.

O.Ir. *fāthe n-*, as far as its form goes, might be derived from *-*e(i̯)-ŏm* without difficulty: but I see no sufficient ground for doing it. *trī n-* 'trium' has not been developed by sound-change merely; it has been assimilated to the nom. acc. *trī* (cp. above, O.H.G. *drīo*, and § 345 p. 247 on Osc. Safinim).

Goth. masc. *gastē* 'of guests' follows *vulfē* (cp. *gastis gasta* : *vulfis vulfa*); the fem. *anstē* is doubtless chiefly due to *baúrg-ē* (O.H.G. *burg-o*) beside *baúrgi-m* (O.H.G. *burgi-n*) and the like (cp. Lat. *apum* instead of *api-um*, Lith. *krūtū* instead of *krūcziū*). The fem., as *náiteinō* (nom. sing. *náitein-s* 'reviling, blasphemy'), follows *managein-ō* (nom. sing. *managei* 'crowd'), which caused the coining of nom. pl. *náiteinōs* on the analogy

of *gibōs*; once we meet with a dat. pl. *-ōm*, *unkaúreinōm* 'in all unburdensomeness' (dat. pl.), a mistranslation of ἐν παντὶ ἀβαρῆ (ὑμῖν ἐμαυτὸν ἐτήρησα), II Cor. 11. 9, on the analogy of *gibōm*.

As to Lith. *krūtū* from *krūtì-s* and the like, see § 402. O.C.Sl. *pątĭjĭ* may be derived from either **-iu̯-om* or **-eu̯-om* (cp. p. 247), compare *pątĭje* § 317 p. 217 and *synov-ŭ* § 349.

§ **349.** 5. *u*-stems. Pr. Idg. *-(u)u̯ŏm*, **sūn(u)u̯ŏm* 'filiorum', see § 344. Avest. *yāϑw-ąm* from *yātu-* 'magician', and the like. Gr. Hom. γούνων δούρων for **γονϝ-ων *δορϝ-ων*. Lat. *manuum* (also contracted, *passūm currūm* etc.), more likely from **-(u)u̯-ŏm* than from **-eu̯-ŏm* (through the intermediate stage **-ou̯-ŏm*). Goth. *mannē* (instead of *-ō*, § 344) O.H.G. O.Sax. *manno* = **manu̯-ōm*. Lith. *sū-nū* for **sūnu̯ū* like *szū̃* for **szu̯ū̃* (I § 184 p. 160).

Aryan. Skr. *sūnūnā́m*, Avest. *bāzunąm*, O.Pers. *parūvnām* 'multorum' (cp. Bartholomae, Bezz. Beitr. XIII 70) *dahyunām* 'regionum', to be explained like *-ĭnām* (§ 348). The Vedas have also *-ūm*, *dasyū́m* from *dásyu-ṣ* 'unbeliever', like *-īm*; see § 348.

Greek. ἡδέων and πήχεων (accented to match πήχεως), with strong stem, following ἡδέες etc., cp. Att. βάσεων § 348.

Old Irish. *bithe n-*, a re-formation following *i*-stems. It is not allowable to derive the ending from **-eu̯-ŏm* (as Windisch does, Paul-Braune's Beitr. IV 250), since *-eu̯-* would have become *-ou̯-* (I § 66 p. 56).

Germanic. Goth. *suniv-ē* following *sunjus* (**suniu̯-iz*). Similarly perhaps O.H.G. *siteo*, *cuniu* 'of the knees' for **-eu̯-ō(n)*, and on account of the likeness to *gesteo* we have the nom. acc. *siti* and dat. *siti-m* following the *i*-flexion.

O.C.Sl. *synov-ŭ*, following nom. *synov-e*.

§ **350.** 6. *n*-stems. Pr. Idg. **ḱun-ŏm* 'canum', see § 344. Skr. *śún-ām ukṣṇ-ā́m áśman-ām*; Avest. *sūn-ąm ašaon-ąm* (*ašavan-* 'holy, pious') *taoxman-ąm* (*taoxman-* 'kinship'). Gr. κυν-ῶν ἀρν-ῶν, τεκτόν-ων ποιμέν-ων, ἀγών-ων πευθήν-ων. Lat. *homin-um juven-um*, inscr. *poumilion-om*.

O.Ir. *con n-*, *āran n-*. Goth. *aúhsn-ē* A.S. *oxn-a* O.Icel. *yxn-a øxn-a* 'of oxen', Goth. *abn-ē* 'of men', *guman-ē haírtan-ē* 'of hearts' (*-ē* instead of *-ō*, § 344), *tuggōn-ō* 'of tongues' *managein-ō* 'of crowds'; O.H.G. *gomōn-o herzōn-o* with the stem transformed on the analogy of *zungōn-o*, cp. *gomōm herzōm* (§ 384). Lith. dial. *szun-ū*, *akmen-ū*; O.C.Sl. *dĭn-ŭ* 'of days' (II § 114 p. 356), *kamen-ŭ*, *zemljan-ŭ* 'of countrymen' (II § 115 p. 362).

Latin. Rarely *-ium*, following *i*-stems; as *carn-ium*.

Balto-Slavonic. Lith. *akmen-ū* was the starting point for other formations of the type of *o*-stems, *akmen-aĩ* etc. (the Author, Lit. Volksl. und Märch., 301). High Lith. has only *szun-iū akmen-iū*, following *i*-stems. So also O.C.Sl. *dĭn-ĭjĭ -ijĭ*, beside *dĭn-ŭ*.

§ **351.** 7. *r*-stems. Pr. Idg. **mātr-ŏm* 'matrum' **dōtr-ŏm* 'datorum', see § 344. Skr. Ved. *svásr-ām* (unique), often *nar-ā́m* = Avest. *nar-ąm* like gen. sing. *nár-as* (§ 235 p. 126), cp. Avest. *vay-ąm* § 348 p. 249. Avest. *māþr-ąm dāþr-ąm*, *str-ąm* and *stār-ąm* from *star-* 'star', *tišr-ąm* f. 'trium'. Gr. Hom. *πατρ-ῶν θυγατρ-ῶν* Att. *ἀνδρ-ῶν*, and by re-formation Att. *πατέρ-ων μητέρ-ων* (like *ἡδέ-ων* and the like); *δωτόρ-ων*, *δοτήρ-ων*. Lat. *mātr-um*, *datōr-um*; Umbr. fratrum *fratrom* 'fratrum'. Osc. fratrúm 'fratrum' *nerum* 'principum, nobilium'. O.Ir, *māthar n- brāthar n-* for **-tr-ŏm* or **-ter-ŏm*. Goth. *brōþr-ē* (instead of *-ō*, § 344), O.H.G. *muoter-o*. Lith. dial. *moter-ū*, O.C.Sl. *mater-ŭ*, *datel-ŭ* 'datorum' (II § 122 p. 389).

**qetu̯er-* 'four' doubtless had gen. pl. **qetur-ŏm*: cp. Skr. *catur-ṇā́m* instead of **catur-ām* (§ 345 p. 247), Gr. Lesb. *πεσύρ-ων*, O.Icel. *fjugurra* with pronominal ending (cp. § 168 p. 11); O.C.Sl. *četyr-ŭ* (*y* = *ū*).

Skr. *dur-ām* (*d-* instead of *dh-*, see I § 480 p. 354) O.H.G. *dur-o* O.Icel. *dur-a* Lith. *dùr-ū* (and *dùr-iū*, Schleicher Lit. Gr. 188) 'of doors'.

Aryan. Special Skr. re-formations are *mātr̥ṇā́m*, *dátr̥ṇām dātr̥ṇā́m*, more rarely with *-r̥ṇām*; *nr̥ṇā́m nr̥ṇā́m* 'ἀνδρῶν'; *catasr̥ṇā́m catasr̥ṇā́m* f. *caturṇā́m* m. 'τετράρων' see § 345

p. 247. In Veda we also find *nr̥̄m*, like *-īm*, see § 348 p. 250. Avest. *tišranąm* instead of *tišrąm* (which is also used), like *vayanąm*, § 348 p. 249.

Old Irish, in addition to the old formation, has *-thre n-*, *brāthre n-*, *brāithre n-*, a re-formation following the *i*-declension, cp. *brāithrib* like *fāithib* § 385. The fem. *teor-a n-* ('three') *cetheor-a n-* ('four') follows *inna n-* (§ 429); see Windisch in Paul-Br. Beitr. IV 224.

Balto-Slavonic. High Lith. *moter-iũ* following the *i*-declension, so also O.C.Sl. *dŭšter-ĭjĭ*, isolated in O.C.Sl.

§ 352. 8. Stems ending in an Explosive.

Pr. Idg. **bhr̥ĝhn̥t-ŏm* (see § 344). Skr. *br̥hat-ám*, Avest. *ber^ezat-ąm ber^ezant-ąm*. Gr. *φερόντ-ων*. Lat. *ferent-um prae--sent-um sonant-um*, also *ferent-ium* etc. (Bücheler-Windekilde, Grundr. 83) like nom. acc. pl. neut. *ferent-ia* (§ 342 p. 242). O.Ir. *carat n-*. Goth. *frijōnd-ē* (instead of *-ō*, see § 344), O.H.G. *friunt-o*. With a *i̯o*-suffix, Lith. *vežancziũ* O.C.Sl. *vezątĭ*. Skr. *dat-ám*, Gr. *ὀδόντ-ων*, Lat. *dent-um* (more commonly *dent-ium*), A.S. *tōð-a* O.Icel. *tann-a*, Lith. *dant-ũ* 'dentium'. — Skr. *daśát-ām* Lith. *deszimt-ũ* O.C.Sl. *desęt-ŭ* 'decadum'. — Osc. liímítú[m 'limitum'. O.C.Sl. *telęt-ŭ* 'of calves' (cp. § 244 pp. 142 f.).

Skr. *śarád-ām* 'of autumns'. Gr. *φυγάδ-ων*. Lat. *lapid--um*. O.Ir. *druad n-* 'druidum'. Goth. *taíhunt-ē* (instead of *-ō*, § 344) in *taíhuntē-hund* '100', O.H.G. *zehanzo* '100' = Gr. *δεκάδ-ων*, see § 179 p. 43; in Norse, too, there may once have been a word **tehunta-hund*.[1]) Skr. *pad-ám*, Gr. *ποδ-ῶν*, Lat. *ped-um*, O.H.G. *fuaz-o* O.Icel. *fot-a* 'pedum'.

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1) This would explain the unexpected *a*-vowel in Norse Run. *þri--taunta* and O.Icel. *þrettān þrettānde* etc. The form **tehunta-hund* may have been wrongly analysed into **tehun-tahund*; indeed, the analogical form *taíhuntaíhund* shows that *taíhuntēhund* was misunderstood in Gothic. This mistake once made, its *a* might pass over to the numbers 13 and so forth, taking the place of their *e*; even as happened when *o* spread from *-κοντα* in Greek, § 176 Rem. 2 p. 31. In this case Noreen (Arkiv für nord. filol. III 26, Paul's Grundr. I 508) would be

Skr. *uśij-ām* ('desirous'). Gr. *μειράκ-ων*, *ὀρτύκ-ων ὀρτύγ-ων*. Lat. *meretrīc-um*, and with *-ium meretrīc-ium felīc-ium*

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right in assuming **-tāhund* = Goth. *-tēhund* for Norse, but wrong in assuming an old ablaut *e* : *ē* in the first syllable of **dekm̥*.

After the discussion of the Numerals in this volume (pp. 1—52) was finished, appeared J. Schmidt's work *Die Urheimath der Indogermanen und das europ. Zahlsystem* (Berlin 1890). In this work he discusses Goth. *taíhuntēhund* O.H.G. *zehanzo* and all connected with them on wholly different principles. He analyses *taíhun-tēhund*, and explains the West-Germanic expressions by a supposed Goth. **hund taíhuntēv* 'tenfold hundred', which he believes to have been levelled with *taíhun-tēhund* in different directions. I cannot here thrash out this interesting question; but I would say that in my opinion the view suggested above (pp. 40 ff.) well bears comparison with Schmidt's. Schmidt (p. 39) sees three main difficulties in it. (1) That the second part of O.Sax. *ant-sibunta* cannot be gen. pl., or it must have ended in *-o*. — This statement is disproved by the genitives *friunda kinda* etc. (§ 345 p. 246). (2) That O.H.G. *zehanzo* Goth. *taíhuntē-* do not answer to Skr. *dašát-ām* Gr. *δεκάδ-ων*. — This statement could only be justified were it proved that the interchange of tenuis and media in the parent language never took place at all, or that the argument could not be used here. To this change I drew attention in Morph. Unt. V 13; compare § 177 p. 34, above. It is well known, and attested by many examples at the present day. The assertion (p. 27 of Schmidt's work) that the inflexion of which *δεκάς -άδος* instead of **-ατος* is an example sprang from the analogy of *Ἑλλάς -άδος* and the like, is a mere assertion, nothing more. (3) That Skr. *śatám* etc., which I compare with *hund* in *taíhuntē-hund*, never means '*δεκάς*', the abstract of 'ten', in any language. — This is very natural, since my assumption is that *taíhuntē-hund* '*δεκάδων δεκάς*' is the very phrase which has been abbreviated into Skr. *śatá-m* etc. 'a group of ten (tens)' etc. Nor is Schmidt the right person to lay stress on a 'difficulty' which is inseparable from his own explanation; he assumes a form *tēhunda-* = **dēkm̥to-*, of which not a trace can be found in any other Indo-Germanic language; Vriddhi in derivatives is not Germanic, although it is Aryan. Which is the simpler of the two explanations? One supposes an immediate connexion between Goth. *taíhuntē-hund* O.Sax. *ant-sibunta* O.H.G. *zehanzo*, each of them containing a genitive of the same kind as Goth. *frijōndē* O.Sax. *friunda* O.H.G. *friunto*; the other — Schmidt's — treats the Gothic and West Germanic expressions as quite different in principle, and has to regard the ending of O.Sax. *ant-sibunta* as distinct from that of O.H.G. *zehanzo*. No one can hesitate to allow that the first is simpler; which of them is correct, or whether another be correct and these both wrong, may be left for decision by further investigation of those who know the facts.

etc. O.Ir. *nathrach n-* 'of water-snakes'. Skr. *vāc-ā́m* Avest. *vac-ąm*, Gr. **ὀπ-ῶν*, Lat. *vōc-um*. Skr. *-rāj-ām*, Lat. *rēg-um*, O.Ir. *rīg n-*, Goth. *reik-ē* (instead of *-ō*). O.Ir. *breg n-* 'of mountains', Goth. *baúrg-ē* (instead of *-ō*) O.H.G. *burg-o* 'of strongholds, of towns' (Avest. *ber^{e}ząm* not found).

Skr. *ap-ā́m* Avest. *ap-ąm* 'aquarum'. Gr. *κλωπ-ῶν*. Lat. *dap-um*, *prīncip-um* (also *-ium*).

§ **353.** 9. Stems in *-s*.

Pr. Idg. **menes-ŏm* (§ 344) from **menos* n. 'mind'. Skr. *mánas-ām durmanas-ām*, Avest. *manaŋh-ąm dušmanaŋh-ąm*. Gr. Ion. *μενέων δυσμενέων* Att. *-ῶν*. Lat. *gener-um*. O.Ir. *tige n-*. O.H.G. *kelbir-o*. Lith. *debes-ū* (beside *debes-iū*) from *debes-ì-s* 'cloud'; O.C.Sl. *sloves-ŭ*. — **mēns-ŏm* 'of months' (see II § 132 p. 415): Gr. *μην-ῶν*, Lat. *mēns-um* (and *-ium*), O.Ir. *mīs n-*. With *s* in the suffix doubtless A.S. *ʒōs-a* O.Icel. *gās-a* Lith. dial. *žąs-ū* Gr. *χην-ῶν* 'anserum', cp. II § 160 p. 485.

Skr. *uṣás-ām*, Lat. *honōr-um* (II § 133 p. 423).

Pr. Idg. comparative **ōk̑is-ŏm* 'ociorum' (cp. II § 135 p. 429). Skr. *áśīyas-ām* Avest. *āsyaŋh-ąm*, Lat. *ōciōr-um*. With *-i̯o-* O.C.Sl. *slaždĭšĭ*. With *-i̯en-* instead of *-i̯es-*, Gr. *ἡδ-ιόν-ων*.

Pr. Idg. part. perf. act. **u̯ei̯dus-ŏm*. Skr. *vidúṣ-ām* Avest. *vīduš-ąm*. With *-i̯o-* Lith. *mìrus-iū* O.C.Sl. *mīrŭšĭ*. With *-u̯et-* instead of *-u̯es-*, Gr. *εἰδότ-ων*.

**mūs-ŏm* 'of mice': Skr. *mūṣ-ām* (nom. pl. *mū́ṣ-as* is found), Gr. *μυῶν* instead of **μυῶν* (§ 160 p. 485), Lat. *mūr-um* (and *-ium*), O.H.G. *mūs-o* O.Icel. *mūs-a*.

§ **354.** 10. *i-* *i̯i̯-* and *ū-* *u̯u̯*-stems, and stems ending in *-r̥*, *-l̥*, *-n̥*.

Pr. Idg. **-i̯i̯-ŏm*, **-u̯u̯-ŏm* (§ 344), e. g. **bhru̯u̯-ŏm* (nom. sing. **bhrū-s* 'brow'). Skr. *dhiy-ā́m bhruv-ā́m*, also *dhīnā́m bhrūṇā́m*, and only *nadī́nām śvaśrū́ṇām* (§ 345 pp. 246 f.). Gr. *κι-ῶν*, *ὑ-ῶν ὀφρύ-ων*, *πολί-ων* from *πόλῑ-ς*, *νεκύ-ων* from *νέκῡ-ς*. Lat. *su-um* (and *-ium*), *socru-um* O.Icel. *sū-a* 'suum' (cp. § 233

p. 123). Lith. dial. *žuv-ū* 'of fishes' = Gr. *ἰχθύ-ων* (cp. *žùv-į* § 217 p. 94, *žuv-ìs* § 329 p. 230); O.C.Sl. *svekrŭv-ŭ*, also *krŭv-ĭjĭ*.

Skr. *gir-ám pur-ám gō-ṣaṇ-ām* like gen. sing. *gir-ás* etc., § 233 p. 123.

§ **355.** 11. Certain Root Nouns. **nāu̯-ōm* 'navium' (§ 344): Skr. *nāv-ám*, Gr. *νᾱ-ῶν νηῶν νεῶν* (I § 611 p. 462). — Skr. *gáv-ām*, also *gṓ-nām* (§ 345 p. 247), Gr. *βο-ῶν*, Lat. *bov-om boum* Umbr. *buo*, Mid.Ir. *bō n-* for **bo(u̯)-ōn* (once *bao* in O.Ir., but perhaps by a mistake in writing), O.Icel. *kū-a* O.H.G. *kuo*, cp. II § 160 p. 482. — Skr. *rāy-ám* Avest. *ray-ąm*, Lat. *rērum* like *faciērum* § 347 p. 249.

Locative Plural.[1])

§ **356.** 1. The Suffix of the Locative Plural. An Idg. ending *-su* is indicated for this case by Aryan and Balto-Slavonic, Skr. *-su* Avest. *-hu*, O.Lith. *-su* O.C.Sl. *-chŭ*. As regards Gr. *μεταξύ*, which is generally adduced as an argument for the same ending, see the Remark on the next page. That Gr. *-σι* is also original is probable on account of the Avest. loc. pl. *haf-ši* and *tanu-ši* (Bartholomae, Bezz. Beitr. XIII 84 f.); and compare Bugge's explanation of Armen. *-ę* as being for **-si* (above, page 245). It is also very probable that *-s* was used as well as *-su* and *si*. If so, these two will be extensions of *-s*, the proper case-suffix, by

1) Osthoff, Die Bildung des loc. plur. im Idg. und Verwandtes, Morph. Unt. II 1 ff. Gerland, Über den dat. plur. des Altgriechischen, Kuhn's Zeitschr. IX 36 ff. Warncke, De dativo pluralis Graeco, Lips. 1880. Ceci, Il Dativo Plur. greco, Scritti glottologici I (1882) pp. 7 ff. Weck, Der altgriech. Dativ Plur., Philologus XLIII 32 ff. *Τσερέπης, Ἡ δοτικὴ πληθ. τῆς Ἑλληνικῆς γλώσσης, Μελετήματα Ἰνδικὰ καὶ γλωσσολογικά*, Athen 1888 pp. 25 ff. Aufrecht, Der dat. plur. auf *-εσσι*, Kuhn's Zeitschr. I 117 f. J. Stschasliwzjew, Über den griech. Dat. Plur. Journ. d. kais. russ. Min. f. Volksaufklärung 1885, 3, pp. 417—458 ff. (only known to me through Ziemer's Jahresbericht über Sprachwissenschaft, Berl. 1889, p. 150). Kögel, Althochdeutsche Locative, Zeitschr. f. deutsche Altert. XXVIII (1884) 110 ff.

accretion of adverbial particles: *-u*, perhaps meaning 'there', may have been the same as the *-u* of Skr. *múh-u* and similar words (see § 256 Rem. p. 158) and that of Gr. *οὗ(τος)* and the like (see § 415); *-i* perhaps meant 'here', and may have been the same as *-i* in the loc. sing. (§ 256 p. 157) and in the Lat. nom. sing. *qo-i quī* (§ 414). See Thurneysen, Kuhn's Zeitschr. XXVII 177.

-s has been kept unextended in the following instances. (1) Lat. *dēvās Corniscās*, *C.I.L.* I no. 814, and with *ō* instead of *oi̯* Lat. Sabell. *-ōs* (§§ 357, 358).[1]) (2) Gr. *ἵπποις*, which also represents the Idg. instr. pl. in *-ōi̯s* (§ 380); the effect of *ἵπποις* on the one hand and *φύλακ-σι* etc. on the other was to prevent the loss of *-σ-* in *ἵπποισι*, *βάσισι*, *φρασί φρεσί* etc., or perhaps we may say to restore it; *-σ-* should have dropped according to I § 564 p. 420; similarly in later times Att. *δώτορσι*, which should properly have become **δώτορρι*, was kept safe by *φύλαξι* etc. (§ 362). It is not so certain that Lat. *oloes lupīs* Osc. Núvlanúís, beside Lat. Sabell. loc. *-ōs*, represent Idg. loc. *-oi̯s* as well as instr. *-ōi̯s*. (3) *-s* is represented in Baltic, and not *-s-u* alone; it is true, this cannot be supported by such forms as Lith. *rañko-s szirdỹ-s* Lett. *růká-s si'rdí-s*, as if these had always ended with *-s*, but it may be considered fairly proved by O.Lith. *-se -sa* beside *-su*. It would be as wrong to suppose that *rañkose* is *rañkosu* transformed on the analogy of *rañkoje*, loc. sing., as to suppose that **φυλακ-συ* became *φύλαξι* on the analogy of the loc. sing.

1) Schmidt (Pluralb. 50) assumes that Lat. *dēvās* represents **-āsu*; this is opposed by the fact that *-ōs* is found in Sabellian. I cannot allow even after the attempt of V. Henry (Mém., VI 377) that a loss of *-u* has been proved either for prehistoric Latin or for proethnic Italic. Schmidt regards as two other plural locatives *ēminus* and *comminus* (from *manu-*). But how this is to be reconciled with the meaning I cannot see. We must surely derive these from adjective stems *ē-minu- com-minu-* or *-min-o-* (from *-man-*, the shorter form of *manu-*). Cp. *ad-versus*. Can it be that they were originally acc. sing. neuter, **ē-minu *ad-versu*, afterwards extended by *-s* like Gr. *εὐθύ-ς μεσση-γύ-ς ἐγ-γύ-ς*? Compare further Bréal-Bailly, Dict. étym. lat.[2], s. v. *cominus*.

φύλαξι; the real explanation is that an original **rankās* (cp. *dēvās*), like original **rankāi̯*, had the particle *-e* attached (see § 264 pp. 167 f.); in the actually found forms *rañkos rûkás -e* has been lost again, just as **-āi̯-e* was shortened, producing *rañkoj* (*rañko*) *rûká*. O.Lith. *-sa* (as *namûsà* 'at home'), if its *-a* be not merely a mistake for *-e* in the spelling, has been transformed from *-se* in connexion with the forms ending with *-sna* (*namûs-nà* 'homewards', acc. pl. with the postposition *-na*); conversely, *-sne* follows *-se*.

Remark. A further piece of evidence in support of *-s* may perhaps be found in the forms Skr. Ved. *mánasu* (beside *mánas-su*) Avest. *manahu* from Ar. *manas-* n., and the like (§ 364). *-s-*, and not *-ss-*, in these forms is shewn to be Idg. by Skr. *ási* Avest. *ahi* = Gr. *εἶ* for **ἐ(σ)ι* 'thou art' from √*es-*. See Hübschmann, Kuhn's Zeitschr. XXVII 329; Bartholomae, Stud. zur idg. Spr., I 20 ff., 55 f., 67 f. The thinning of *ss* to *s* was doubtless proethnic when final, but not otherwise (all languages have *-s* for Idg. **-ss*, even Skr., as *a-ghas* 2nd sing. pret. 'thou atest' = **a-ghas* + *s*, see Bartholomae, *op. cit.* 21 f.); and the origin of **menesu *menesi* was that *u* and *i* were affixed to **menes* = *menes-s*; similarly **esi* 'thou art' = **es* (for *es-s*) + *i*. Of the examples by which Bartholomae seeks to prove a change of Idg. *-ss-* to *-s-*, apparently the only ones which are correct are such as allow of an explanation like this. If the view here suggested is right, such forms as Gr. *ἕζεσσα* Lat. *gessī* need not be due to re-formation. Skr. *mánas-su* Gr. *μένεσ-σι ἐσ-σὶ* have been formed on the analogy of stems which ended in some other consonant than *s*; and there is nothing to prevent our believing them to be proethnic themselves.

But it is most unsafe to try to support the assumption of the loc. pl. *-s* by reference to Gr. *ἀγκάς* beside *ἀγκών*; see J. Schmidt, Kuhn's Zeitschr. XXV 39, and the Author, Morph. Unt. III 69. The same may be said of adverbs in *-s*, as Gr. *πύξ μάψ ἅπαξ* Lat. *mox vix* O.Ir. *mō mo- mos-* 'mox' (for **moks*) Skr. *hurúk híruk* (*-k* for **-kš*), notwithstanding Skr. *makṣú* Gr. *μεταξύ*. The *-s* of these adverbs seems more likely to be the same as that of *ἄψ ἀμφίς* Lat. *cis* Avest. *us* (*ud* + *s*) O.Pers. *abiš* etc., which we are hardly justified in regarding as a plural locative suffix. *makṣ-ú μεταξ-ύ* moreover prove nothing, because the particle *u* attaches itself to other forms besides plural locatives. Nor can any stress be laid on Boeot. *τῦς γονεῦς* (= *τοῖς γονεῦσι*), Collitz Gr. Dialektinschr. no. 391. 5; probably we should read with Fick *γονέῡς* = *γονέ-οις*.

How *-s- s-u* and *-s-i* were distributed in the parent language (for we can hardly suppose that every word formed

three distinct locatives, all of which were used together) can no longer be made out. The general preference for *-su* and *-si* rather than *-s* is explained by the fact that these *s*-forms often were exactly the same as the nominative singular.

In Iranian the postposition *ā* (or its unaccented by-form *a*, see § 246 p. 145) attached itself to locative plurals in *-su*: in Old Persian there is no other ending but *-uv-ā -šuv-ā*, while Avestic has *-hv-ă -sv-ă* along with *-hŭ -šŭ*. Compare Skr. Ved. *nadīṣv ā́* 'in the streams' *mártyēṣv ā́* 'among mortals' and the like; also pr. Ar. **aśuāi̯-ā* 'in equa' § 264 p. 167.

In Armenian we find *-ç*, as in the gen., dat., and abl.; Bugge sees Idg. **-si* in *-ç*, see § 344 p. 245.

Greek. *-σιν* beside *-σι* like *-φιν* beside *-φι*. Compare § 186 p. 62, § 281 pp. 186 f., and the Author, Gr. Gr.[2] § 64 Anm. 3 p. 80.

In Keltic and Germanic the locative plural had fallen out of living use before the date of the earliest remains of those languages. Whether it survives in adverbs, still remains to be discovered (on O.Ir. *mō* 'mox' see the Remark above). As regards alleged locatives like O.H.G. *Ōtingas* see § 357.

2. The Form of the Stem. This was weak, from the proethnic period onwards, in consonant stems which had gradation.

In Aryan, the loc. pl. and cases with a *bh*-suffix (Skr. *-bhyaṣ*, *-bhiṣ*, *-bhyām*) often show the form of the nominative singular instead of the stem. The occurrence of such groups of words as (Skr.) *dhā́ma* : *dhā́ma-su -bhyas* etc., *áśvā* : *áśvā--su -bhyas* etc., *bṛhatī́* : *bṛhatī́-ṣu -bhyas* etc. suggested some necessary connexion between the form of what are called the "Middle Cases" with that of the nominative singular; hence Skr. *mánaḥ-su mánō-bhyas -bhiṣ -bhyām* following *mánaḥ mánō* instead of *mánassu* (*mánasu*) **manad-bhyas* etc., *haríḥ--ṣu havír-bhyas* following *haríḥ havír* instead of *haríṣṣu *havídbhyas*, Avest. *ravō-hu* instead of *ravahu* following *ravō*, O.Pers. *rauca-biš* from *rauca*, Avest. *ber^ezaþ-byō* instead of *ber^ezaδbyō* following *ber^ezaþ* (§§ 303 f. pp. 203 f., §§ 364, 367,

375, 376, 386, and 387). Compare Osthoff, Morph. Unt. II 3 f.; Wackernagel, Das Dehnungsgesetz der gr. Comp., 7 f.; Bartholomae, Kuhn's Zeitschr. XXIX 581 f.

In Balto-Slavonic, the loc. plural along with the other middle cases was attracted into the *i*-declension, as Lith. *akmen-ysè*, earlier **-i-se*, O.C.Sl. *kamen-ĭ-chŭ*, like *akmen-ì-ms kamen-ĭ-mŭ*, *akmen-i-mìs kamen-ĭ-mi*, sing. *akmen-i-mì kamen-ĭ-mĭ*, dual *akmen-ì-m -i-m̃ kamen-ĭ-ma*. See § 402. But we still find O.Slav. *poljachŭ* (O.Czech *Polás*) *poljamŭ poljami* from *poljan-* (see I § 585. 3 p. 440, II § 115 p. 362, III §§ 361, 367, 404), with which we should perhaps compare Lith. dial. *žmoymis* (*oy* = *ů*) from nom. sing. *žmů̃* (Fortunatov, Bezz. Beitr. III 72).

§ **357.** 1. *o*-stems. Pr. Idg. **u̯l̥qoi̯-s -su -si* 'in lupis'; the stem-final *-oi̯-* is borrowed from the pronoun (§ 430). Skr. *vṛ́kē-ṣu*; Avest. *vehrkaę-šu -šv-a*, O.Pers. *mādaišuv-ā* 'in Medis'. Armen. *gailoc̣*, if *-c̣* is Idg. **-si* (§ 344 p. 245); if so, *-o-* has displaced **-oi̯-* on the analogy of *gailo-vk̄*. Gr. *λύκοι-ς -οι*; *-οι* in Attic gave way gradually before *-ς* from 450 B. C. onwards. O.C.Sl. *vlŭcĕchŭ* (I § 462 p. 338).

Italic. It is a question whether Lat. *lupīs* O.Lat. *oloes* 'illis', Umbr. veskles *vesclir* 'vasculis' *alfer* 'albis' Osc. Núvlanúís 'Nolanis' *nesimois* 'proximis', and so forth, represent the Idg. locative and instrumental, or instrumental only; see § 356 p. 257. On the analogy of *-ās* (*ā*-stems) was coined a loc. pl. series in *-ōs*, instead of *-oi̯s*, which seems to be as early as the proethnic stage of Italic (cp. Lat. *-ōrum* following *-ārum* § 345 p. 247, and Lith. *-ůsu* Lett. *-ůs* following *-ōsu -ás*, see below): O.Lat. (Dvenos inscription) *deivōs* 'deis',[1]) Marruc. *aisos* Mars. *esos* 'deis'.

1) It should be mentioned that the latest discussion of the Dvenos inscription, by R. S. Conway (Am. Journ. Phil. X 452, 458), explains *deivos* as nom. pl. (cp. Umbr.-Samn. *-ōs*). — *Written after the above had been printed.*

Remark. It is doubtful whether we are to agree with Kögel in regarding as locative plural the West Germanic place-names in *-as*, as O.H.G. *Ōtingas* (assumed to = **Audingá-su* 'among the sons of *Ōto*'). See Kögel, Zeitschr. für d. Alt. XXVIII 110 ff., Paul-Braune's Beitr. XIV 115 ff. Henning (Deutsche Lit.-Zeit. 1888 p. 16) and Behaghel (Paul's Grundr. I 609) regard *-as* as the Latin accusative ending (*ad Otingas*). If Kögel is right, the *-a-* of *-a-s* is far more likely to be an analogical transformation of Idg. *-oi̯-*, as we have just assumed the *-o-* of Armen. *gailoc̣* to be, than the pr. Idg. ending of noun-stems for this case, which must then be assumed to have been exchanged for the *-oi̯-* of pronouns in Aryan etc., but at no earlier period: observe O.C.Sl. *těchŭ* Lith. *tůsè* : *vlŭcěchŭ vilkůsè* in contrast with dat. *těmŭ těms* : *vlŭkomŭ vilkáms*. Compare further Kluge, Paul's Grundr. I 387.

Baltic. Lith. *vilkůsu -sè* (*-sa*) *-ūs* Lett. *wi'lkůs* on the analogy of the **-ā-su -se* of *ā*-stems, like Lat. *deivōs* following *dēvās* (see above). Lith. dial. *vilkunse* following the acc. pl. *vilkuns-na*. See § 326 Rem. pp. 227 f.

§ **358.** 2. *ā*-stems. Pr. Idg. **eḱu̯ā-s -su -si* 'in equabus'. Skr. *áśvā-su*; Avest. *haęnā-hu -hv-a*, O.Pers. *aniyāuv-ā* 'in aliis' for **-ā-hu̯-ā* (I § 558 pp. 413 ff.). Gr. inscr. *δραχμῆσι ταμίᾶσι* etc., from about 420 B. C. only surviving petrified in adverbs, as *θύρᾶσι Ἀθήνησι*. O.Lat. *dēvās*, see § 356 p. 257. Lith. *rañko-su -se -s* Lett. *rǎká-s*; O.C.Sl. *rąka-chŭ*.

Greek. Ion. Att. *νύμφῃσι* Att. Lesb. *νύμφαισι* are reformations on the lines of *-οισι*. To banish from the text of Homer and other authors all forms in *-ῃς*, which happens never to occur on inscriptions, and to replace them with others in *-αις* except only where *-ῃσ'* can be read, is a rather arbitrary fiat of modern critics. They may be explained as a transformation of **-ᾱς -ης* by analogy; and perhaps *-ης* was still used in the age of Homer.

Latin. Besides *dēvās*, are we to cite *forās* 'outside, out of doors' (*forās* 'out, outwards' is acc.), and *aliās alterās* (sc. *vicibus* or *occāsiōnibus*)?

§ **359.** 3. *ī-*, *i̯ē*-stems (cp. p. 68, footnote). Pr. Idg. probably **bhr̥ĝhn̥tī-s -su -si*. Skr. *bṛhatī́-ṣu* Avest. *barenti-šu -šv-a*. Lith. *žẽmė-su -se* O.C.Sl. *zemlja-chŭ* with *-i̯ē-* instead of *-ī-*.

Gr. *φερούσησι*, *-ῃσι -αισι* on the lines of *i̯ā*-stems (cp. the footnote on page 68). So too Lith. *vežanczio-su -sè -ō-s* O.C.Sl. *veząšta-chŭ*.

§ **360.** 4. *i*- and *u*-stems.

Pr. Idg. **oṷi-s -su -si*. Skr. *ávi-ṣu*. Uncertain: Armen. *srti-ç*; see § 344 p. 245. Gr. Ion. Att. etc. *τρι-σί*, Dor. *ὄφι-σι*. Lat. *tri-su -sè* 'in tribus', O.C.Sl. *noštĭ-chŭ*.

Pr. Idg. **sūnu-s -su -si*. Skr. *sūnú-ṣu*, Avest. *bāzu-šu -šv-a*. Uncertain: Armen. *zarduç*; see § 344 p. 245. Gr. *γονεῦ-σι*, cp. below. O.C.Sl. *synŭ-chŭ* (not found, but this is a mere accident).

Greek. *ὄφι-σι* became *ὄφεσι* (Hom. Att. Arcad.) by association with *ὄφεις* (**ὄφε-ες*) *ὄφεων*. So **πηχυ-σι *ἡδυ-σι* became *πήχε-σι ἡδέ-σι* by association with *πήχεες* etc. *-υ-σι* remained only in *γονεῦσι* for **-ε̯υ-σι* = Skr. *-ayu-ṣu*, see § 261 p. 162; but later on there were coined sporadically such forms as *τοκέσι* following *ἡδέσι*, like nom. pl. *τοκεῖς* instead of *τοκῆς* following *ἡδεῖς*.

Hom. *ὄεσσι* (*ὄι-ς*) and *πελέκεσσι πολέσσι* (*πέλεκυ-ς πολύ-ς*) owe their *σσ* to the poetic use of doublets like *ἔπεσσι* and *ἔπεσι* side by side.

The *es*-stem ending *-εσσι -εσι* was adopted not only by all consonant stems and by *ī- i̯i̯-* and *ū- u̯u̯*-stems, but by stems in *-i-* and *-u-* in the Aeolic dialects (in Homeric too), in N. W. Greek, and in parts of the Doric area; e. g. Hom. *ὀί-εσσι οἴ-εσι* Lesb. *διαλυσί-εσσι* Hom. *ταχέ-εσσι*. But again, the *o*-stem ending *-οις -οισι* spread in like manner in N. W. Greek and in certain divisions of the Peloponnese; e. g. *τρι-οῖς -οῖσι πολέ-οις* (= *πόλεσι*); *τρι-οῖς* : *τρι-ῶν* = *καλοῖς* : *καλῶν*. Each of these new departures started from the consonant stems, and originated in a wish to have the same stem-ending for the locative plural as for the other cases: e. g. *φερόντ-εσσι -οις* instead of pr. Gr. (Cret.) *φέρονσι* (Ion. Att. *φέρουσι* Lesb. **φέροισι* etc.), following *φέροντ-ες* etc.

Lith. *nakty-su -sè -ỹ-s* Lett. *naktí-s* and Lith. *sūnů-su -sè -ū̃-s*. **-i-su *-u-su* became **-ī-su *-ū-su* by association

with *-ā-su, and *-ū-su then became -ů-su by association with stems in -o-. See § 326 Rem. pp. 227 f.

§ **361.** 5. *n*-stems. Pr. Idg. *k̑(u)u̯n̥-s -su -si. Skr. śvá-su áśma-su, Avest. dāmo-hu -hv-a (dāman- 'creature') = Skr. dhā́ma-su (I § 94 p. 88). Uncertain: Armen. akanc̣ anjanc̣, see § 344 p. 245. Gr. Cret. πλία-σι (Att. πλέοσι, nom. sing. πλέων, cp. § 364 Rem.), Attic and Pindaric φρα-σί (Att. usually has φρε-σί, nom. sing. φρήν), Att. etc. ὀνόμα-σι (nom. sing. ὄνομα) = Skr. nā́ma-su (II § 82 p. 250). Then Armen. anjan-c̣ : anjin-k̑ = Gr. φρα-σί : φρέν-ες. Old Czech Polás, elsewhere O.Slav. poljachŭ with -ch- on the analogy of the other stems, beside nom. pl. O.C.Sl. poljan-e, see § 356 p. 260.

Greek. ἀρνάσι instead of *ἀρα-σι with ν from the other cases. πλέο-σι φρε-σί ἄκμο-σι ποιμέ-σι ἀγῶ-σι have taken ο, ε, or ω instead of α from the other cases, cp. ὄφε-σι ἡδέ-σι § 360 p. 262. On the analogy of φρε-σί : φρένες, ἄκμο-σι : ἄκμονες was coined κυσί instead of *κυα-σι (*πα-σι) beside κύνες. With -εσσι: Hom. ἡγεμόν-εσσι λιμέν-εσσι κύν-εσσι Megar. λαγόν-εσσι etc. With -οις: N.-W. Gr. μειόν-οις ἀγών-οις El. ἀγών-οιρ, etc.; see § 360 p. 262.

Lith. szun-y-su -sè akmen-y-su -sè and O.C.Sl. kamen--ĭ-chŭ, following the *i*-class: see § 356 p. 260.

§ **362.** 6. *r*-stems. Pr. Idg. *mātr̥-s *dōtr̥-s -su -si. Skr. mātŕ̥-ṣu dā́tr̥-ṣu. Uncertain: Armen. marc̣, and with strong stem dsterc̣ (or dsterac̣); see § 344 p. 245. Gr. μητρά--σι, ἀνδρά-σι, and with strong stem δώτορ-σι δοτῆρ-σι.

Greek. It is due to the force of association with connected forms that δώτορσι keeps -ρσ- in later Attic, instead of becoming -ρρ- (I § 563. 3 p. 419). With -εσσι: Hom. Boeot. ἄνδρ-εσσι Hom. θυγατέρ-εσσι. With -οις: N.-W. Gr. ἄνδρ-οις and so forth, see § 356 p. 262.

Lith. moter-y-su -sè and O.C.Sl. mater-ĭ-chŭ following the *i*-class; see § 356 p. 260.

§ **363.** 7. Stems ending in an Explosive.

Pr. Idg. *bhr̥ĝhn̥t-s -su -si. Skr. br̥hát-su bhárat-su, Avest. ber^{e}zasu (I § 473. 2 p. 349). Gr. Cret. ἐλόνσι βάλλονσι

νῑκᾱ́σανσι Att. *ἑλοῦσι βάλλουσι νῑκήσᾱσι.* The old ending *-ᾰσσι* = **-ατ-σι *-n̥t-si* is still seen in Heracl. *πρᾱσσόντ-ασσι ἔντ-ασσι*, which took the place of **πρᾱσσᾰσσι *ᾰσσι* (cp. Skr. *sat-su* = **s-n̥t-su*), the stem of *πρᾱ́σσοντ-ες ἔντ-ες* etc. having been substituted for the proper stem in these latter forms; compare *ἀρνᾱ́σι* instead of **ἀρα-σι*, § 361, last page. *νήφοσι* (Theogn.) from *νήφω* 'I am sober' instead of **νήφασι*, with *o* from *νήφοντ-ες* etc., compare *χαρί-εσι* following *χαρί-εντ-ες* (below). With *-εσσι*: Hom. *ἀκουόντ-εσσι* Lesb. *φερόντ-εσσι* Hom. N.W. Gr. *πάντ-εσσι.* With *-οις*: N.-W. Gr. *ἀγγελλόντ-οις ὄντ-οις* and the like, see § 360, last page. O.C.Sl. *telęt-ĭchŭ* following the *i*-flexion, cp. § 244 pp. 142 f. — Lith. *vẽžanczìû-su -se* O.C.Sl. *vezǫšti-chŭ*, as though a *ǫ*-stem.

Skr. *ápa-vat-su* (*ápa-vant-* 'watery'), Gr. *χαρί-εσι* instead of **-ϝατ-σι* (cp. *νήφοσι*, above); see II § 127 p. 404.

Avest. *nafšu* = pr. Ar. **napt-su* from Ar. *napāt- napt-* 'descendant'; see I § 471 p. 348.

d-stems. Skr. *śarát-su* 'in autumns'. Gr. *φυγάσι* (*νιφάδ-εσσι -οις*). Skr. *pat-sú*, Gr. *ποσί* Hom. *ποσσί* (*πόδ-εσσι ποδ-οῖς*).

Skr. *uśíkṣu*, stem *uśij-* 'desirous', Avest. *tuxšv-a*, stem *tuc-* 'covering, mat'. Gr. *μείραξι ὄρτυξι* (*σκυλάκ-εσσι πτερύγ-εσσι, φυλάκ-οις*).

Skr. *ap-sú* 'in waters'. Gr. *κλωψί* (*γύπ-εσσι*).

§ **364.** 8. *s*-stems.

Pr. Idg. **menes -esu -esi, -es-su -es-si* from nom. acc. sing. **menos* 'mind', see § 356 Rem. p. 258. Skr. *mánas-su*, Ved. *mánasu* also, Avest. *manahu -hv-a*; on Skr. *mánah-su* see below. Gr. *μένεσι* Hom. *μένεσ-σι.* Lith. *debes-y-su -sè* O.C.Sl. *sloves-ĭ-chŭ*, see § 356 p. 260. — Gr. Cret. *μησί* Att. *μησί* instead of **μενσι* Att. **μεισι*, which it should have been, cp. nom. sing. *μείς* (I § 611 p. 462, II § 132 p. 415, III § 199 p. 81); so *-η-* came from the other cases; observe that Idg. **mēnsi* would have become Att. **μηνι.* Similarly Att. *χησί* instead of **χᾱσι* = **χᾰνσ-σι.* — Skr. *māsú*, later *mās-su*, from *más* 'mensis', see II § 132 p. 415, § 134 p. 425.

Skr. *havíṣ-ṣu* (*havíḥ-ṣu*, see below) like *mánas-su*. Gr. *δέπασι* Hom. *δέπασ-σι*.

Comparative **ōk̂is -isu -isi, -is-su -is-si* 'in ocioribus'. Skr. *ā́śīyas-su* (*āśīyaḥ-su*, see below). O.C.Sl. *slaždĭši-chŭ* as though a *i̯o*-stem.

Remark. Gr. *ἡδίοσι πλέοσι* are not for **-ιοσ-σι*, but have a *i̯en*-suffix, like Cret. *πλία-σι* (§ 361 p. 263). The weak cases seem never to have had *-ιοσ-* in Greek; see II § 135 Rem. p. 429. Hence we find no **ἡδίοσσι* like *ἔπεσ-σι*; and, although *πλεόν-εσσι μειόν-οις* do occur, we never see **πλεό-εσσι -οις* like *ἐπέ-εσσι -οις* and *δεπά-εσσι*.

Part. perf. act. **u̯ei̯dus -usu -usi, -us-su -us-si*. Everywhere we meet with re-formations. Skr. *vidvátsu* has *t* from *vidvád-bhyas* etc., where *-dbh-* comes regularly from **-zbh-*, see II § 136 p. 441.[1]) Gr. *εἰδόσι* doubtless belongs to a *u̯et*-stem, and so stands for **-ϝοτ-σι* (II § 136 p. 440), cp. N.W.Gr. *γεγονότ-οις*. Lith. *mìrusiů-su -se* O.C.Sl. *mĭrŭši-chŭ*, as though a *i̯o*-stem.

Gr. *μῡσί* (preserved by Herodian, and in the Batrachomyomachia 260), with variant *μῠσί*, by re-formation; see II § 160 p. 485. O.C.Sl. *myšĭchŭ* following the *i*-declension. Skr. *mūṣ-ṣu* not found.

Aryan. With nom. sing. form substituted for the stem: Skr. *mánaḥ-su ā́śīyaḥ-su havíḥ-ṣu*, Avest. *ravō-hu* from *ravah-* 'happiness, joy'. See § 356 p. 259.

Greek. *-εσσι*: Hom. *ἐπέ-εσσι ὁμηγερέ-εσσι* Lesb. *ἐτέ-εσσι*, Hom. *δεπά-εσσι*; *-οις*: N.-W. Gr. *ἐτέ-οις* Messen. *εὐσεβέ-οις*, see § 360 p. 262. *-εσσι* was of course taken from forms like *ἔπεσ-σι*; and it was not until *-εσσι* had become naturalised in other consonant stems that such a word as *ἐπέ-εσσι* could be coined.

§ 365. 9. *ī- i̯i̯-* and *ū- u̯u̯*-stems, stems in *-r̥̄*, *-l̥̄*, and *-n̥̄*.

Pr. Idg. *-ī-s -su -si, -ū-s -su -si*; e. g. **bhrū-s -su -si* from nom. **bhrū-s* 'brow'. Skr. *dhī-ṣú nadī́-ṣu*, *bhrū-ṣú*

1) In writing this passage I was under the mistake of supposing that **-vas-su* would regularly become *-vatsu*. Against this see Bartholomae, Stud. zur idg. Spr., I 9 ff.

śvaśrū-ṣu. Gr. *κῑ-σί πόλῑ-σι* (from *πόλῑ-ς*), *ὀφρύ-σι ὑ-σί νέκῡ-σι* (from *νέκῡ-ς*) with *ῑ ῡ* following *κῑ-ες* etc. It is possible that where we now read *νέκυσσι γένυσσι πίτυσσι* forms ending in *-ῡσι* once stood in the text of Homer. *-εσσι*: Hom. *σύ-εσσι νεκύ-εσσι,* see § 360 p. 262. Lith. *žuv-y-su -sè* O.C.Sl. *krŭv-ĭ-chŭ* (not actually found) following the *i*-flexion; but *svekrŭv-a-chŭ* follows the *ā*-flexion (cp. gen. pl. *svekrŭvŭ* : *rąkŭ*).

Skr. *gīr-ṣú*, *pūr-ṣú*, *gō-ṣā-su* (the last not actually found) like nom. sing. *gīr* etc., see § 197 p. 76 above.

§ **366.** 10. Pr. Idg. **nāu̯-s -su -si* 'in navibus': Skr. *nāu-ṣú* Gr. *ναυ-σί*; Homer uses the re-formate *νηυ-σί*, like *νηῦς*, following *νη-ός* etc. (I § 611 p. 462), but he also has the regular form in the compound *ναυσι-κλυτός*. Skr. *gō-ṣu*, Gr. *βου-σί*.

Hom. *νή-εσσι νέεσσι*, *βό-εσσι* Boeot. *βού-εσσι*, N.-W. Gr. *βό-οις*; see § 360 p. 263.

Dative-Ablative Plural.[1])

§ **367.** 1. The Suffix. Since both the Aryan forms in *-bhi̯as* and the Latin in *-bus* are used for dative and ablative alike, we must suppose that this twofold function is as old as the parent language. Then the use of the genitive plural with ablative sense in Greek and Balto-Slavonic is a later developement, due to the use of the singular genitive in *-es -os -s* with this sense, which was also proethnic. We need hardly find a difficulty in the initial of the dative plural suffix in Balto-Slavonic, which is *m-* and not *bh-* (Lith. *-mus* O.C.Sl. *-mŭ*). As the *bh-* suffix had both meanings, we may fairly infer the same of the *m*-suffix.

1) V. Henry, Essai de systématisation des désinences en **-bh-* dans la langue latine, Mém. de l. Soc. d. lingu. VI 102 ff. L. Havet, Datifs-ablatifs plur. en *-ībus* [en latin], *ibid.* III 412 ff. L. Duvau, Datif plur. de l'ombrien, *ibid.* VI 104. Förstemann Zur Geschichte altdeutscher Declination: Der dat. plur., Kuhn's Zeitschr. XVI 81 ff. Much, Germanische Dative aus der Römerzeit, Zeitschr. f. deutsch. Altert. XXXI 354 ff. J. Schmidt, Der altpreuss. dat. pl. auf *-mans*, Kuhn-Schleicher's Beitr. IV 268 ff.

The endings which have to be compared in order to restore the Indo-Germanic suffix are the following: Skr. *-bhyas* (*-bhiyas* frequently in Vedic) Avest. *-byō* = pr. Ar. **-bhi̯as* (**-bhii̯as*); Lat. *-bos -bus* Osc. *-fs -ss* Umbr. *-s* = pr. Ital. **-fos *-bhos*;[1]) Gall. *-bo*;[2]) O.Lith. *-mus*, modern *-ms*, Pruss. *-mans -mas*, O.C.Sl. *-mŭ*. On the variation between *-bh-* and *-m-* see § 274 pp. 175 f. We have no right to assume that the *i̯* which follows the initial of the suffix in Aryan has been dropped in the other languages, and to derive (say) Ital. **-fos* from **-fi̯os*. Whence comes the *i̯* of *-bhyas*, or of *-bhya -bhyam -bhyām*, is an obscure point.

Gall. *-bo* is related to Lat. *-bo-s* as Skr. *-bhya* (*tú-bhya* 'tibi') to *-bhya-s*, and as instr. **-bhi* (sing. and pl. in Greek, elsewhere only sing., § 274 p. 175, § 281 pp. 186 f.) to Skr. *-bhi-ṣ*. This suggests the question whether the wide-spread Lith. *-m* found along with *-mus*, and Lett. *-m* (e. g. Lith. *rañko-m* Lett. *rŭká-m* beside Lith. *rañko-mus -ms*) does not represent a form **-mo* without *s*, like Gall. *-bo*.[3]) This view seems to be supported by an instr. pl. *-mi* instead of *-mis*, found in the Godlewa district of Lithuanian and in Lettic folk-songs (e. g. Godl. *nakti-mì* = *nakti-mìs*, Lett. *kâjá-mi* = Lith. *kójo--mis*); see § 379. Then again the *-m* of the Germ. "dative" plural has to be considered. It is conceivable that O.W.Germ. *-ms* and Norse *-mr* (§ 379) represent an instr. suffix **-mis*; only it must perhaps be granted that **-mz* sometimes came

1) It should be mentioned that the Umbr.-Osc. ending might without irregularity be derived from **-fis* = Skr. *-bhiṣ* (instr. pl.).

2) Only found in one inscription, which is wrongly denied to be Keltic by d'Arbois de Jubainville (Rev. Celt. XI 249). — We are not justified in seeing this Gall. *-bo* in O.Ir. *na-b*, as Windisch does (Paul-Braune's Beitr. IV 221). In this there has doubtless been merely loss of the palatal sound, first taking place before non-palatals, as *dinab gabalib*. (Thurneysen.)

3) In *Lit. Volksl. und Märch.*, pp. 297 f., I explained *rañkom*, with Brückner, as the dual form used in the plural. This is unquestionably possible; compare the Russian instr. dual in *-ma* with plural meaning (Vetter, Zur Gesch. der nom. Decl. im Russ., 50 f.).

from a dative in *-*mos*. But no one has proved the existence of any sound-law by which the -*m* of all Germanic dialects — even in O.Icel. we find e. g. *þri-m* beside *þri-mr* 'tribus', and others — could be derived from *-*mz* (there is no manner of need to derive the Goth. 1st. pl. *baíra-m* from *-*mz*). I therefore conjecture that Germanic, like Baltic, inherited from the parent speech a plural *-*mi* (cp. sing. O.H.G. *zi houbitun* A.S. *dǣ-m* § 282 p. 188), and perhaps *-*mo* as well. It follows that the pluralising of *bh*- and *m*-suffixes by adding -*s* was not complete in the parent language.

Remark. It is perhaps allowable to analyse Pruss. -*mans* into *-*mŏm* + *s* (*-*mom* beside *-*mo* like Skr. -*bhyam* : *bhya*, Gr. -φιν : -φι), notwithstanding *amsis* 'people' *gimsenin* 'birth', on the strength of *mensā menso* 'flesh, meat'. This word answers to Goth. *mimza*-, and there is no reason to suppose that it was a Slavonic loan-word (*męso*); doubtless in *mensā menso m* became *n* by dissimilation, and the same process might change *-*mams* to -*mans*. *-*mom* might be compared with O.C.Sl. -*mŭ*. But doubts are suggested by Lith. -*mus* -*ms*, which cannot be derived from *-*mans* (on the acc. Lith. *dëvùs*: Pruss. *deiwans* see § 326 p. 227); and the question arises whether -*mas* in Prussian (e. g. *nou-mas* 'nobis') were not the older form. Pruss. -*mas* and Lith. -*mus* might be connected with original *-*mōs*, and -*mans* may really be due to association with the acc. pl. in -*ans*. Lith. -*mus*, with O.C.Sl. -*mŭ*, may however be derived from Idg. *-*mus*. Ergo, non liquet. Compare further Osthoff, Morph. Unt. II 31 f.; Leskien, Ber. der sächs. Ges. der Wiss., 1884, pp. 101 f.

Armenian has -*ç*, as in the gen. and loc., see § 344 p. 245. In Greek the form ceased to be used at all; its dative meaning was expressed by the locative and instrumental, and its ablative meaning, as already stated, by the genitive. Old Irish dropped it in favour of the instrumental.

2. Form of the Stem. This was weak, right down from the proethnic period, in consonant stems which admitted of gradation, as **pəter*- 'pater'.

Aryan often shews the nom. sing. form where the stem should be, as Skr. *mánō-bhyas* Avest. *manē-byō*. See on this point § 356 pp. 259 f.

In Latin and Oscan consonant stems show the *i*-stem ending, as Lat. *mātr-ibus ferent-ibus* like *ori-bus tri-bus*,

Osc. *lig-is* 'legibus'. But Umbr. *-us* in *fratrus* aŝet-us etc. seems to have been taken from *u*-stems (beru-s 'verubus').

As regards the stem in Germanic see § 379. 2.

In Balto-Slavonic the *i*-stem ending has become the regular one, as it did in the other *m*-cases and in the locative plural; e. g. Lith. *akmen-ì-ms* O.C.Sl. *kamen-ĭ-mŭ*. But we still find O.Slav. *poljamŭ* = **poljān+mŭ*, see § 356 p. 260.

§ **368.** 1. *o*-stems. Pr. Idg. **u̯lqo-bh-* (*-m-*). Skr. *vṛ́kē-bhyas* Avest. *vehrkaẹibyō* with pr. Ar. *-ai̯-* instead of *-a-* following pronouns like *tḗ-bhyas taẹibyō*. (Goth. *vulfa-m* O.H.G. *wolfum* beside *þái-m dē-m*, cp. § 367 p. 267 f. and § 380). Lith. *vilka-mus -á-ms* O.C.Sl. *vlŭko-mŭ* beside *tĕ-ms tĕ-mŭ*.

Latin forms in *-ibus* from *o*-stems, as *amīcibus suibus* (see Bücheler-Windekilde, Grundr. pp. 126 f.) are later reformates instead of the forms in *-īs* (§ 380). But the pronouns *ī-bus* 'eis' (cp. Skr. *ē-bhyás*), variant *ĭ-bus* (*i*-stem like *quĭ-bus*), and *hī-bus* 'his', may be regarded as proethnic.

Remark. In O.C.Sl., *i̯o*-stems show not only *-i̯e-mŭ* but *-ĭmŭ* *-i̯ĭmŭ*, as *zŭlodĕjĭmŭ*, and similarly instr. sing. *zŭlodĕjĭmĭ* dat. instr. dual *-jĭma*. We may regard *ĭ* (after sonants *-i̯ĭ-*) as the weak grade of the suffix *-i̯o-* (cp. O.H.G. *hirti-m* § 380), the *š* of *glagoljąštĭmŭ* as taken from the other cases, and occasional forms like *stražije* (nom. pl.) 'watchers' as later re-formates on the lines of the *i*-declension. Thus *-dĕjĭmŭ*: *-dĕjemŭ* Lith. *gaidžiá-ms* (*gaidỹ-s* 'cock') = O.H.G. *hirtim*: Goth. *haírdjam*. This would make it easier to see why so many masc. neut. consonant stems became *i̯o*-stems in Balto-Slavonic; for example, part. gen. Lith. *vẽžanczio* O.C.Sl. *vezą̨šta* 'vehentis', O.C.Sl. *dateljĭ* 'dator'. That is to say, if there was an *-i-* in the *m*-cases of *i̯o*-stems in pr. Balt.-Slav., their ending was the same as that of consonant stems, which already formed these cases after the model of stems in *-i-* (§ 402); it was easy enough, for example, to form cases from **u̯ežont-i̯o-* when there was a form **u̯ežont-i-m-*. Another point remains to be investigated. What was the cause of the very common transfer of *i*-stems to the *i̯o*-class in older Lithuanian (as *krỹ-ti-s* II § 100 p. 306): may not forms analogous to O.H.G. *hirtim* have helped the change, and not merely the similar ending of the nom. acc. singular?

§ **369.** 2. *ā*-stems. Pr. Idg. **ek̑u̯ā-bh-* (*-m-*). Skr. *áśvā-bhyas*, Avest. *haẹnā-byō*. Lat. *equā-bus*; *-ā-bus* was more widely spread in the oldest Latin (e. g. *manibus dextrābus*),

but used later only to distinguish genders (as *fīliīs* and *fīliābus*), and in the re-formates *duābus ambābus* (plural suffix instead of dual). Gall. *ναμαυσικᾱ-βο*, used attributively with *μᾱτρεβο* 'matribus'. (Goth. *gibō-m* O.H.G. *gebō-m*, see § 367 pp. 267 f., § 381). Lith. *rañko-mus -ms*, O.C.Sl. *rąka-mŭ*.

§ **370.** 3. *ī-* *i̯ē*-stems (cp. p. 68, footnote). Pr. Idg. **bhr̥ĝhn̥tī-bh-* (*-m-*). Skr. *bṛhatī-bhyas*, Avest. *barenti-byō*. (O.H.G. *digī-m* 'to prayers', see § 367 pp. 267 f. and § 382). With *-i̯ē-* instead of *-ī-*: Lat. *faciē-bus*, Umbr. *iovies* for **-iē-fs* beside the acc. pl. *iovie(f)* § 328 p. 229. So also Lith. *žẽmė-mus -ms*, O.C.Sl. *zemlja-mŭ*; but others have *i̯ā*-flexion (cp. footnote on p. 68), Lith. *vẽžanczio-ms*, O.C.Sl. *vezą̨šta-mŭ*.

§ **371.** 4. *i*-stems. Pr. Idg. **ou̯i-bh-* (*-m-*). Skr. *ávi-bhyas*, Avest. *aži-byō*. Lat. *tri-bus ovi-bus turri-bus*; Umbr. tris 'tribus' avis aves *aveis* 'avibus', Osc. luisari-fs (Bücheler, Rhein. Mus. XLIV 328), cp. teremn-íss 'terminibus' § 373; the vowel of the last syllable was long in Umbrian: would this be "compensatory lengthening", or the analogy of the accusative plural? (Goth. *ansti-m* O.H.G. *ensti-m*, see § 367 pp. 267 f., § 383). Lith. *nakti-mus -ì-ms*, O.C.Sl. *noštĭ-mŭ*.

§ **372.** 5. *u*-stems. Pr. Idg. **sūnu-bh-* (*-m-*). Skr. *sūnú-bhyas*, Avest. *bāzu-byō*. Lat. *manu-bus mani-bus lacu-bus laci-bus*, see I § 49 pp. 41 f. and Bücheler-Windekilde pp. 124 f.; Umbr. beru-s 'verubus'. (Goth. *sunu-m*, see § 367 pp. 267 f., § 383). Lith. *sūnu-mus -ù-ms*, O.C.Sl. *synomŭ* for **synŭ-mŭ*, which by some chance is never found, nor is **synŭ-mĭ* (§ 282 p. 189).

§ **373.** 6. *n*-stems. Pr. Idg. **k̑(u)u̯n̥-bh-* (*-m-*), possibly assimilated **k̑(u)u̯m̥-bh-*, see I § 222 p. 190. Skr. *śvá-bhyas áśma-bhyas*, Avest. *dāma-byō* and *draomē-byō* (*draoman-* 'assault, onset') with *-ē-* from the *es*-stems (*manē-byō*, § 376) by reason of the identical loc. ending in the two classes (*dāmohu* = **dāmahu* like *manahu*, § 361 p. 263). Lat. *homin-i-bus* Osc. teremn-í-ss 'terminibus', but Umbr. karn-u-s

'carnibus', *homon-u-s* 'hominibus', see § 367, p. 268. Lith. *szun-i-mus akmen-i-mus -ì-ms*, O.C.Sl. *kamen-ĭ-mŭ* following *i*-flexion, but O.C.Sl. keeps *poljamŭ* for **poljān-mŭ* (I § 219 pp. 185 f.), see § 367 p. 269.

§ **374.** 7. *r*-stems. Pr. Idg. **mātr̥-bh- *dōtr̥-bh-* (*-m-*). Skr. *mātŕ-bhyas dā́tr̥-bhyas*, Avest. *māter^e-byō dāter^e-byō*. Lat. *mātr-i-bus datōr-i-bus*, Umbr. fratr-u-s *fratr-u-s* 'fratribus' *ner-u-s* 'proceribus'. Gall. *mātre-bo* (*ματρεβο*) 'matribus'; it is not certain whether *-re-* = Idg. *-r̥-* (*-re-* instead of O.Kelt. *-ri-* I § 298 p. 236, as in *vergo-bretu-s* beside O.Ir. *breth* f. 'sentence, judgement' = Idg. **bhr̥-tā*), or if the word once was **mātr-i-bo*, and has changed to *mātrebo* under the influence of *i*-stems; cp. O.Ir. instr. *māthraib māithrib* § 385. (Goth. *brōþru-m*, O.H.G. *muoterum*, see § 367 pp. 267 f., § 385). Lith. *moter-i-mus -ì-ms* O.C.Sl. *mater-ĭ-mŭ*, following the *i*-class.

§ **375.** 8. Stems ending in an Explosive.

Pr. Idg. **bhr̥ĝhu̯d-bh-* (*-n̥t-m-*), from the stem **bhr̥ĝhont-*. Skr. *bṛhád-bhyas*; Avest. *ber^ezad-byō*, *ber^ezanbyō* with substitution of the strong stem, and *ber^ezaβbyō* with the nom. acc. sing. in place of the stem (§ 356 p. 259). Lat. *ferent-i-bus*, Umbr. aṣet-u-s 'agentibus', see § 367 p. 268. (Goth. *frijōnd-a-m tunþ-u-m* etc., see § 386.) Lith. *vẽžantë-ms* (pronominal ending), O.C.Sl. *veząšte-mŭ* like a *i̯o*-stem; Lith. *dant-ì-ms* 'dentibus', O.C.Sl. *telęt-ĭ-mŭ* (see § 244 pp. 142 f.).

Skr. Ved. *nádbhyas* for **nabd-bhyas* from *nápāt- napt-* 'descendant', cp. Avest. loc. *nafšu* § 363 p. 264. (Goth. *tigum* 'decadibus' for pr. Germ. **tezun(d)-m-*, see § 386).

d-stems. Skr. *śarád-bhyas* 'to autumns'. Skr. *pad-bhyás* Avest. *pad^e-byō*, Lat. *ped-i-bus* Umbr. *du-purs-u-s* 'bipedibus' (§ 367 p. 268). (Goth. *fōt-u-m*, § 386).

Skr. *vāg-bhyás* 'vocibus', Avest. *vāγž^ebyō* from a base not found elsewhere, *vāc(a)h-*, or it may contain the nom. *vāxš* instead of the stem (§ 356 p. 259), Lat. *vōc-i-bus* following the *i*-declension. Skr. *viḍ-bhyás* Avest. *vīž-byō* pr. Ar. **u̯iž-bhi̯as* from *víś- vīs-* 'clan, village community' (I § 404 p. 299), but contrariwise Skr. *dig-bhyás* (stem *díś-* 'direction') instead of

**diḍbhyas* follows *dikṣú* and *dík* (§ 356 p. 259). Lat. *lēg-i-bus* Osc. *lig-i-s* 'legibus' following the *i*-class.

Skr. *adbhyás* Avest. *aiwyō* from the stem *ap-* 'water', see I § 328 p. 265.

§ **376.** 9. *s*-stems. Pr. Idg. **menez-bh-* (*-es-m-*) from nom. sing. **menos.* Skr. *mánō-bhyas* instead of **manadbhyas* following *mánō*, similarly Avest. *manē-byō* instead of **manaz-byō* following Gāthic *manē*, see § 356 p. 259 and Bartholomae Kuhn's Zeitschr. XXIX 572 f. and 582, Stud. zur idg. Spr. I 2 f. Lat. *gener-i-bus* follows the *i*-class. (O.H.G. *kelbir-um*, see § 387). Lith. *debes-ì-ms* O.C.Sl. *sloves-ĭ-mŭ* following the *i*-class.

Skr. *sudábhyas* Avest. *hudåbyō* (stem *su-dás- hu-dāh-* 'giving richly'), instead of **sudādbh- *hudāzb-*, following the nom. *sudā́ hudå* (§ 356 p. 259). But there are some regular forms, as Ved. *mādbhyás* (later *mābhyás*) from *mās* 'mensis', and *uṣádbhyas* (later *uṣā́bhyas*) from *uṣás-* 'dawn'. Lat. *mēns-i-bus*, cp. O.Ir. *mīs-i-b* § 387.

Skr. *havír-bhyas* instead of **havíḍbhyas* (cp. *viprúḍbhyas* from *vipruṣ-* 'drop, crumb') following the nom. *havír* 'libation'; but Avest. *snaiþiž-byō* is regular (inferred from *snaiþiž-bya* § 304 p. 204).

Comparative. Pr. Idg. **ōk̑iz-bh-* (*-is-m-*). Skr. *áśīyō-bhyas* like *mánō-bhyas.* Lat. *ōciōr-i-bus* like an *i*-stem. O.C.Sl. *slaždĭše-mĭ* like a *i̯o*-stem.

Part. perf. act. Pr. Idg. **u̯ei̯duz-bh-* (*-us-m-*). Skr. *vidvád-bhyas* with the strong suffix *-vas-*, Avest. *vīdūžbyō.* Lith. *mìrusë-ms* (pronominal ending), O.C.Sl. *mĭrŭše-mŭ* like a *i̯o*-stem.

Lat. *mūr-i-bus* and O.C.Sl. *myšĭ-mŭ* declined in the *i*-class, pr. Idg. **mūz-bh- *mūs-m-.*

§ **377.** 10. *ī- i̯i̯-* and *ū- u̯u̯*-stems, and stems in *-r̥̄, -l̥̄, -n̥̄.*

Pr. Idg. *-ī-bh- -ū-bh-, -ī-m- -ū-m-.* Skr. *dhī-bhyás nadī-bhyas, bhrū-bhyás śvaśrū-bhyas.* Lat. *sū-bus*, also *sŭ-bus*, doubtless because of *sŭ-is* etc. (cp. Gr. ὗς § 365 pp. 265 f.),

and *su-i-bus.* (O.Icel. *sū-m*, see § 388.) Lith. *žuv-ì-ms* O.C.Sl. *krŭv-ĭ-mŭ* in the *i*-class, but *svekrŭva-mŭ* in the *ā*-class (cp. *svekrŭva-chŭ* § 365 p. 266).

Skr. *gīr-bhyás*, *pūr-bhyás*, *gō-ṣā-bhyas* (the last not actually found) for **gr̥-bh-* etc., like nom. sing. *gír* etc., see § 197 p. 76.

§ **378.** 11. Skr. *nāu-bhyás*, Lat. *nāv-i-bus* in the *i*-class. Skr. *gō-bhyas*, Lat. *bū-bus bō-bus.* Skr. *rā-bhyás*, Lat. *rē-bus.*

Instrumental Plural.[1])

§ **379.** 1. The Suffix. Stems in *-o-* had for their ending *-ōi̯s*, which may perhaps be analysed *-o+a^x i̯s* (I § 150 p. 136); on O.C.Sl. *-y* see § 380. The other classes show the following endings: Skr. *-bhiṣ* Avest. *-bīš* O.Pers. *-biš* = pr. Ar. **-bhiš*; Armen. *-bk̑ -vk̑* (which Bugge conjectures to be **-bhis-u̯*, as he supposes *-k̑* in the nom. pl. to be **-(e)s-u̯*, see § 313 p. 212); Gr. *-φι -φιν*; O.Ir. *-b* = pr. Kelt. **-bis* (*-i-* has left its mark in the palatal vowel of the preceding syllable, and *-s* in the usual absence of any spirant as the initial of the following word, see I § 576 p. 432, § 658. 1 p. 510; Windisch, Paul-Braune's Beitr. IV 221); Germ. **-miz* (O.Icel. *-mr*, as *þri-mr* § 383, O.West-Germ. *Vatvī-ms* § 382) and **-mi*; Lith. *-mis* dial. *-mi*, O.C.Sl. *-mi.* Lith. dial. pl. *-mi* beside sing. *-m* (see the Author, Lit. Volksl. und Märch., p. 297) and Lett. *-mi* (§ 367 pp. 267 f.) point to **-mī*; similarly, Lett. *wîtă-mis* 'here and there' from *wîta* 'place' (Bielenstein, Die lett. Spr., II 34) doubtless points to **-mīs.*[2]) Consequently

1) Compare the footnotes on pp. 173, 256, and 266.

2) The area over which the Lith. pl. *-mi* extends has yet to be determined. It seems to be as early as Bretken, in the form *sunumi*, see Bezzenberger Beitr. zur Gesch. der lit. Spr., 149. The ending cannot be the same as the sing. *-mi*, because the sing. suffix always appears as *-m* in Godlewa. It is not probable that *-mi* and the Lett. pl. *-mi* have lost *-s* through being used before spirants, and that the forms thus produced became the only ones. Lett. *-mi*, if Lettic alone be taken into account, might as a last resort be regarded as the singular form; compare *abbu rûku* 'with both hands', in Bielenstein II 23, also singular in form. But it may not be separated from the Lith. pl. *-mi.* Lastly, as to the

Lith. *-mìs* will represent an older **-mīs*, and O.C.Sl. *-mi* an older **-mī* or **-mīs*. It follows that we may regard as proethnic **-bhi(s)* and **-mi(s)*, perhaps also the same forms with a long *-i*, **-bhī(s)* **-mī(s)*. If *-mi* and *-mī* were both proethnic, the different quantity has been turned to account in Baltic, and possibly in Slavonic (that is, if *-mi* never had an *-s*) to distinguish singular and plural. On the whole question compare § 367 pp. 267 f.

The Avesta contains plural instrumentals in *-ĭš* from consonant stems, as *nāmēn-īš ašaon-īs savaŋhat-iš* (*savaŋhant-* 'useful'), which, like the instr. in *-āiš* and sporadically those in *-bĭš*, are used sometimes as nom. acc. neuter. No trustworthy evidence of these forms has been found in other languages; Bartholomae's comparison of Gr. *ἄνις ἄλις χωρίς* is very dubious; compare further Curtius Grundr.[5] 650, and Strachan in Bezz. Beitr. XIV 176. So long as this is the case, and their extended use has not been explained, we must hesitate to regard them as being original instrumental forms, tempting though it may be to suppose that this *-ĭš* is related to the ending *-ōi̯s* = *-o+a^x i̯s* as the abl. *-d* of Skr. *ma-d* to *-ōd* = *-o+a^x d* (§ 240 pp. 133 f.). See Bartholomae, Bezz. Beitr. XV 16 f., Stud. zur idg. Spr., I 75 f. Perhaps Bartholomae's comparison of the instrumental sing. *nāmēn-ī* takes us a step further. For this suggests the obvious conjecture that *nāmēn-īš nāmēn-ī* (*ē* = Ar. *a*) are instead of **nāma-mĭš* **nāma-mĭ* (cp. Skr. *sanē-mi* § 282 pp. 187 f., and also O.Ir. *anmimm* § 281 p. 186); when the *m*-suffixes were in course of dying out, *m* might easily be replaced by *n* taken from the other cases, and then *nāmēnīš* might be regarded as containing a suffix *-ĭš*.

2. Form of the Stem. The remarks made in § 367. 2 (pp. 268 f. above) apply here.

quantity of *i* in Lett. *-mi -mis*, the Lith. pl. *-mi* = **-mī* and O.C.Sl. *-mi* support the view that the vowel was once long, and gives no countenance to a supposed exception to regular rule, whereby original short *i* should be kept in popular poetry against the recognised laws affecting final syllables.

In Old Irish the consonant-stem ending *-ib* was borrowed by some of the *i*-stems and some of those in *-o-* or *-ā-*. The forms were related to *mnāib* just as Lat. *homin-i-bus mātr-i--bus* etc. to *equā-bus*.

Germanic. The suffix of consonant stems was **-mi(s)*, not **-ṇmi(s)* or **-əmi(s)* as assumed by Kluge and others; which we are doubtless to infer from *tigum* for **teʒun(d)-mi* = Skr. *daśád-bhiṣ* (§ 386).[1] The *-um* of Goth. A.S. O.Sax. *fōt-um*, Goth. *mēnōþ-um* etc. arose from A.S. *earnu-m* (§ 384), Goth. *brōþru-m* (§ 385), *sunu-m* (§ 383); and the spread of this *-um*, along with the *-a-m* of *o*-stems (Goth. *frijōnd-am reik-am*) and the *-i-m* of *i*-stems (Goth. *baúrg-im*) was due to the same desire after uniformity of stem which produced *φερόντ-εσσι -οις* to take the place of *φέρονσι* (§ 360 p. 262). *-am* was naturally suggested by the analogy of the gen. pl.: e. g. *frijōndē* : *vulfē*.

§ **380.** 1. *o*-stems. Pr. Idg. **u̯l̥qōi̯s*; the European languages have *-oi̯s* for *-ōi̯s* in accordance with I §§ 611 ff. Skr. *vṛ́kāiṣ*, Avest. *vehrkāiš*. Gr. *λύκοις*, also locative (§ 356 p. 257, § 357 p. 260). Lat. *lupīs* O.Lat. *oloes* 'illis' (I § 81 p. 74), Umbr. veskles *vesclir* 'vasculis' *vereir* 'porta' *alfer* 'albis' (I § 81 p. 75), Osc. Núvlanúís 'Nolanis' *nesimois* 'proximis': cp. § 357 p. 260. Lith. *vilkaĩs*.

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1) The comparison of *tigum* with Skr. *daśá-bhiṣ*, which has lately found another champion in J. Schmidt (Urheimath der Indog., pp. 25 f.), is not to my mind convincing; for **dekṃ* was an adjective and not an abstract substantive. Schmidt cites a passage from a Lithuanian tale, in which he translates *ìsz trijú devyniú stukéliu* 'of three nines of pieces', and says the phrase illustrates the transition from the adj. 'ten' to the subst. 'ten'. This is not to be admitted, because the expression is something quite strange to Lithuanian; and the context, which refers to a superstitious belief, should first itself have been explained. Schmidt scores a point against us in remarking that no Germanic *t*-stem has lost this explosive in the dat.-instr. pl. as I assume. This is true enough; but neither is there any other form in *-um* from a nasal stem which Schmidt can place by the side of his *tigum* = *daśábhiṣ*. From this, then, no conclusion can be drawn which could be decisive for one or other of these two explanations. My view has the support of Kluge (Paul's Grundr., I 404).

Since *o*-stems had *-bhi* and *-mi* in the instr. singular (§§ 281, 282 pp. 186 ff.) it is not surprising that we find *bh*- and *m*-suffixes in the plural along with *-ōi̯s*. Skr. Ved. *vṛ́kē-bhiš*, Avest. *vehrkaę-ibiš* O.Pers. *martiyai-biš* 'mortalibus': cp. dat. *vṛ́kē-bhyas vehrkaę-ibyō* § 368 p. 269, and instr. sing. Skr. *sanē-mi* § 282 pp. 187 f. Armen. *gailo-vk*, cp. sing. *gailo-v*. Gr. *παρ' αὐτό-φι* 'with them', cp. *ἀπὸ στρατό-φι* 'from the host of ships'. O.Ir. *fer*^{a}*ib* for **u̯iro-bis*. Goth. *vulfa-m* O.H.G. *wolfum wolfom* O.Icel. *ulfum*, cp. O.H.G. *zi houbitun* § 282 p. 188. Is West-Germ. and Norse *-um* = Goth. *-a-m*, or is it an extended use of the *-um* discussed in § 379 p. 275? O.H.G. *-im*, as in *hirtim* beside *hirtum* (Goth. *haírdjam*), appears to show *-i-*, the weak-grade form of the suffix *-i̯o-* (Streitberg, Paul-Br. Beitr. XIV 189), and the same view may be taken of *i* in O.Ir. *cēlib* (beside *cēle* 'comrade'), cp. O.C.Sl. dat. pl. *žŭlodějĭmŭ* § 368 Rem. p. 269, and O.H.G. *digīm* § 382.

An isolated form is seen in O.C.Sl. *vlŭky*, *kraji* (*krajĭ* 'border') with *-jī* for **-jy* (I § 60 p. 47). The same ending occurs with consonant stems, but only in the neuter, as *imen-y* § 384: which suggests a conjecture that in *o*-stems also it was originally peculiar to the neuter. We are still in the dark as to the origin of this *-y*. So far as we can tell from the Slavonic sound-laws discovered thus far, it cannot be compared with the Idg. ending **-ōi̯s*, notwithstanding W. Schulze's paper in Kuhn's Zeitschr. XXVII 421, and the new discussion of Wiedemann, Das litau. Praet., p. 47. We may conjecture that **-ōi̯s* would become first **-oi̯s* and then an *-ĕ* or *-i*.

Remark. I should like to throw out the question whether the adverbial ending *-y*, as in *maly* 'little', is the **-ū* of the acc. pl. of *u*-stems (§ 339 p. 239), so that *maly* originally meant 'pauca'. If such adverbs as this became equivalent in use to those in *-mi* (cp. Miklosich, IV 712), *-y* might come to be added to the instr. pl. It would then have crept into the regular case-system just as the adv. ending **-tos* did in Sanskrit and Armenian (§ 244 pp. 141 f.). If **-ōi̯s* finally became **-ĕ* or **-i*, a desire to differentiate once again cases which had run together in form may have caused *-y* to become the regular ending.

§ **381.** 2. *ā*-stems. Pr. Idg. **ekuā-bhĭ(s)* (*-mĭ-(s)*). Skr. *áśvā-bhiṣ*, Avest. *haęnā-biš*. (Gr. *ἀγέλη-φι* and so forth only in the singular.) O.Ir. *mnāib tuath^aib*. Goth. *gibō-m*, O.H.G. *gebō-m*. Lith. *raňko-mis* dial. *-mi*, O.C.Sl. *rąka-mi*.

Gr. *χώραις*, Lat. *mēnsīs* Umbr. anzeriates *aseriater* 'observatis' Osc. Diumpaís ('nymphis') are re-formates on the model of *-oi̯s*, the *o*-stem ending.

§ **382.** 3. *ī- i̯ē*-stems (cp. footnote to page 68). Pr. Idg. **bhṛǵhṇtī-bhĭ(s)* (*-mĭ(s)*). Skr. *bṛhatī-bhiṣ*, Avest. *barenti-biš*. O.Ir. *insib*. O.West-Germ. inscr. *Vatvī-ms Aflī-ms* beside the Latinised forms *Vatviā-bus Alfiā-bus* in the period shortly after the commencement of our era (Much, Zeitschr. für deutsch. Alt. XXXI 354 ff.); perhaps examples may be found in some of the O.H.G. *ī*-abstracts, such as *digī-m* 'to prayers', cp. the gen. pl. § 347 p. 249. With *-i̯ē-*: Lith. *žẽmė-mis* dial. *-mi*, O.C.Sl. *zemlja-mi*.

Gr. *φερούσαις*, Goth. *frijōndjō-m* O.H.G. *kuninginnō-m*. Lith. *vežanczio-mìs -mì* O.C.Sl. *vezą̨šta-mi* as if *ā*-stems (cp. footnote on page 68).

§ **383.** 4. *i-* and *u*-stems.

Pr. Idg. **oṵi-bhĭ(s)* (*-mĭ(s)*). Skr. *ávi-bhiṣ*. Armen. *srti-vk'*. O.Ir. *fāithi-b tri-b*. Goth. *ansti-m* O.H.G. *ensti-m*; O.Icel. *þri-mr* ('three') — the Runic *gestumʀ* ('guests') follows the *o*-class, cp. Noreen in Paul's Grundr. I 493, Burg, Die ält. nord. Runeninschr., 77. Lith. *nakti-mìs* dial. *-mì*, O.C.Sl. *noštĭ-mi*.

Pr. Idg. **sūnu-bhĭ(s)* (*-mĭ(s)*). Skr. *sūnú-bhiṣ*, Avest. *hūzu-biš*. Armen. *zardu-k'* for **-uv-k'*. Goth. *sunu-m*, O.H.G. *sitim* as though an *i*-stem. Lith. *sūnu-mìs* dial. *-mì*, O.C.Sl. *synŭ-mi*. How to regard O.Ir. *beth^aib* is uncertain.

Remark. In Irish we are struck with the almost universal 'breaking' or 'infection' of the vowel of the stem, as *fedaib mogaib*; since **vidu-bis* would have become *fiduib fidib* or something of that kind. Breaking has been caused either by the influence of *o*-stems or by a coincidence of *uⁱ* and *aⁱ* in unaccented syllables.

§ **384.** 5. *n*-stems. Pr. Idg. **k̑(u)ṵṇ-bhĭ(s)* or **k̑(u)ṵm-bhĭ(s)* I § 222 p. 190 (*-mĭ(s)*). Skr. *śvá-bhiṣ áśma-bhiṣ*.

Avest. *dāma-bīš*, *dāmē-bīš* like *draomē-byō* § 373 p. 270. Armen. *akam-bk̑*. Gr. *κοτυληδον-ό-φι* instead of **κοτυληδο-φι* **κοτυληδα-φι* like *μειόν-οις* instead of *μείο-σι* **μεια-σι* (§ 361 p. 263). O.Ir. *con*ᵃ*-ib*, *fiadn*ᵃ*-ib* (*fiadu* 'witness'), *toimten*ᵃ*-ib*, see § 379 p. 275. A.S. *oxnum* O.Icel. *yxnum* ('oxen') A.S. *earnum* O.Icel. *ǫrnum* ('eagles') O.Icel. *bjǫrnum* ('bears'): here *-n-* was borrowed from the gen. pl. and acc. pl., but **-um* came from *-m̥-m-* (earlier *-n̥-m-*), cp. § 332 p. 233; thus the principle is the same as gave rise to Gr. *ἀρνάσι*, earlier **ἀρα-σι* (§ 361 p. 263). This shews that there once was in Germanic an instr. in **-umi* from a nom. in **-an-iz*, like Armen. *akam-bk̑* *anjam-bk̑* from *akun-k̑* *anjin-k̑*, Gr. *φρα-σί* from *φρέν-ες* and so forth. Lith. *szun-i-mìs* *akmen-i-mìs* dial. *-mì*, O.C.Sl. *kamen-ĭ-mi* as though an *i*-stem, O.Slav. *polja-mi* like *polja-mŭ* § 373 p. 271; O.C.Sl. neut. *imen-y* like *igy* § 380 p. 276.

Germanic. Goth. *gumam* = **guman-mi*, like *tuggōm* *manageim* O.H.G. *zungōm* *menigīm* for **-ōn-mi* **-īn-mi*; O.H.G. *gomōn* a re-formate like *gomōno* § 350 p. 252. The old ending is seen varied in another way in Goth. *aúhsnam* ('oxen') *abnam* ('men'), neut. *vatnam* (nom. acc. *vatna*), cp. gen. *aúhsnē* : *vulfē*; similarly *frijōndam* because of *frijōndē*, see § 379 p. 275.

§ **385.** 6. *r*-stems. Pr. Idg. **mātr̥-bhĭ(s)* **dōtr̥-bhĭ(s)* (*-mĭ(s)*. Skr. *mātŕ̥-bhiṣ* *dátr̥-bhiṣ*, Avest. *māter*ᵉ*-biš* *dāter*ᵉ*-biš* (inferred from the dat. plural). Armen. *mar-bk̑* *dster-bk̑*. O.Ir. *māthr*ᵃ*-ib* *māithrib* is just as ambiguous as Gall. *μᾶτρεβο*, see § 374 p. 271. Goth. *brōþru-m*, O.H.G. *muoterum*. Lith. *moter-i-mìs* *-mì*. O.C.Sl. *mater-ĭ-mi* following the *i*-class.

§ **386.** 7. Stems ending in an Explosive. Pr. Idg. **bhr̥ĝhn̥d-bhĭ(s)* (*-n̥t-mĭ(s)*). Skr. *bṛhád-bhiṣ*; Avest. *ber*ᵉ*zad-biš*, with strong stem *ber*ᵉ*zanbiš*, and with the nom. acc. sing. neut. form in place of the stem *ber*ᵉ*zaṇ-biš* (§ 356 pp. 259 f.). O.Ir. *cairti-b*, see § 379 p. 275. Goth. *frijōnd-am* O.H.G. *friunt-um*, Goth. *tunþ-um* A.S. *tōd-um* O.Icel. *tǫnn-um* (cp. Skr. *dad-bhíṣ*, Lith. *dant-i-mìs* *-i-mì*), see § 379 p. 275.

Lith. *vežanczíaĩs* O.C.Sl. *vezǫšti* as through *i̯o*-stems; O.C.Sl. *telęt-y* (*telę* n. 'calf', see § 244 pp. 142 f.) like *igy* § 380 p. 276.

Avest. *azd^e-bīš* from *ast-* n. 'bone'. Goth. *tigum* 'decadibus' for **teǯun(d)-mi* like Skr. *daśád-bhiṣ*, Idg. **dek̑m̥d-bh-* **dek̑m̥t-m-*, cp. § 379 p. 275.

d-stems. Skr. *śarád-bhiṣ*. O.Ir. *druidi-b*, see § 379 p. 275. Skr. *pad-bhíṣ*,[1]) Avest. Gāthic *pad^e-bīš*, Goth. O.Sax. *fōt-um* O.H.G. *fuaǯ-um* (§ 379 p. 275).

Skr. *vāg-bhíṣ* from *vác-* 'vox'. As to Skr. *viḍbhíṣ* *-rāḍbhiṣ* and *digbhíṣ*, see § 375 p. 271. Avest. *maz-bīš* (*maz-* 'great') instead of **mažbīš* following the dat. sing. *maz-ōi* etc. Beside Avest. *vīž-byō* Skr. *viḍ-bhíṣ* we find O.Pers. *vīþibiš* (as we should read, not *vīþaibiš*), but we know too little of the language to pronounce upon it. Goth. *reikam*, but *baúrg-im*, see § 379 p. 275.

Skr. *adbhíṣ* from *ap-* 'water' like *adbhyás* § 375 p. 272.

§ **387.** 8. *s*-stems. Pr. Idg. **menez-bhĭ(s)* (*-es-mĭ(s)*). Skr. *mánō-bhiṣ*, Avest. *manē-biš* (= Pāli *manē-(b)hi*? *vid.* Bloomfield, Am. Journ. Phil. III 36), see § 376 p. 272; similarly O.Pers. *rauca-biš* following the nom. acc. *rauca* 'day' (Avest. *raocō*). Gr. *ὄρεσ-φι*. O.Ir. *tigib* perhaps for **teges-o-bis*, as in the dual, see § 304 p. 204. Goth. *agis-am* O.H.G. *kelbir-um*, cp. § 343 p. 243; does O.H.G. *sigim* stand for **seǯes-mi*? compare § 226 p. 108. Lith. *debes-i-mìs* dial. *-mì* after the *i*-flexion, O.C.Sl. *sloves-y* like *igy* § 380 p. 276.

Skr. *sudā́-bhiṣ* Avest. *hudā́-bīš*, Skr. *mād-bhíṣ* *mā-bhíṣ* *uṣád-bhiṣ* *uṣó-bhiṣ* like the answering dative forms, § 376 p. 272. O.Ir. *mīs^a-ib* for **mīs-o-bis* (§ 379 p. 275), cp. Lat. dat. *mēns-i-bus*.

Skr. *havír-bhiṣ* Avest. *snaiþiž-biš*, comparative Skr. *áśīyō-bhiṣ*, participle Skr. *vidvád-bhiṣ* Avest. *vīđūž-bīš*, like the dative forms § 376 p. 272. O.C.Sl. *slaždĭši*, Lith. *mìrusiais* O.C.Sl. *mĭrŭši* as though *i̯o*-stems.

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1) There never was a form *paḍbhíṣ* from *pad-*, see Bartholomae, Bezz. Beitr. XV 3 ff.

A.S. O.Icel. *mūs-um* O.C.Sl. *myšĭ-mi* from **mūs-* 'mouse', see § 376 p. 272, § 379 p. 275.

§ **388.** 9. *ī-* *i̯i̯-* and *ū-* *u̯u̯*-stems, stems in *-r̥̄*, *-l̥̄*, *-n̥̄*.

Skr. *dhī-bhíṣ nadī́-bhiṣ bhrū-bhíṣ śvaśrū́-bhiṣ.* (Gr. sing. *ἶ-φι.*) O.Icel. *sū-m* ('sows'). Lith. *žuv-i-mìs* dial. *-mì*, O.C.Sl. *krŭv-ĭ-mi* after the system of *i*-stems, but *svekrŭv-a-mi* like a stem in *-ā-* (cp. *svekrŭv-a-chŭ* § 365 p. 266). Compare § 377 pp. 272 f.

Skr. *gīr-bhíṣ*, *pūr-bhíṣ*, *gō-ṣā-bhiṣ* (the last not found), for **g̯r̥̄-bh-* etc., like the nom. sing. *gī́r* etc., see § 197 p. 74.

§ **389.** 10. Skr. *nāu-bhíṣ*, Gr. *ναῦ-φι.* Skr. *gṓ-bhiṣ* Avest. *gao-bīš*; Mid.Ir. *buaib* doubtless not for **bō-bis*, but originally a dissyllable *bu-aib* for **bo-aib* (Thurneysen); O.Icel. *kū-m* A.S. *cū-m* O.Low-Frankish *cuon.* Skr. *rā-bhíṣ.* Compare § 378 p. 273.

The Influence of Analogy as seen in the Transformation of whole Case-Systems in the separate languages (Metaplastic series).

§ **390.** In the foregoing paragraphs (§§ 190 to 389) the history of each single case has been traced through the separate languages of our group; and in so doing we have often come across cases, or even whole systems of cases, which have been affected by metaplasm. But it was impossible to present a sufficiently wide survey of such forms when they were not *single* cases, but *groups*; and a large number of them have not been mentioned at all. Our next task then is to collect and supplement these examples. Still, we must give up the idea of giving a complete list; mention will be made only of what is remarkable or characteristic.

Remark 1. A more exhaustive study would show, particularly if it dealt with later or quite modern periods,[1]) how often similar

1) Compare, for example, Torp, die Flexion des Pali, Christiania 1881; Vetter, Zur Gesch. der nomin. Decl. im Russ., Lpz. 1883; Baudouin

causes have produced exactly the same effects in different languages for example, the disuse of the consonant flexion and the adoption of vowel flexion instead. It is true always, as it is true here, that where we can trace certain principles acting in later periods, we may use these as our guides in dealing with prehistoric times.

Remark 2. The mutations of form which we are now to discuss arose chiefly from proportional analogy; that is, the likeness of two forms of a form-system caused others, hitherto unlike, to be assimilated to each other. To suppose (as certain scholars do) that all arose in this way, and could arise in no other, is wrong: one out of many proofs that this is a mistake is Ar. *napāt-* 'descendant', which takes the flexion of kinship names such as *bhrātar-* 'brother', e. g. Skr. *náptṛ-bhyas* beside *ná(b)d-bhyas*, Avest. *naptār-em* beside *napāt-em*; the two case-groups had had no point of contact before this assimilation took place. Compare the general remarks on the principles involved, by the Author, Liter. Centralbl. 1880 p. 944; Paul, Principien[2] 95; Wackernagel, Kuhn's Zeitschr. XXV 289 f.; Wheeler, Analogy (Ithaca, N. Y. 1887) pp. 9 ff.; Bartholomae, Kuhn's Zeitschr. XXIX 524 ff.; Michels, Zum Wechsel des Nominalgeschlechts, I (1889) pp. 10 f.; Bojunga, Die Entwicklung der nhd. Substantivflexion, pp. 1 ff.

Lastly, we shall give a few systems of declension for which no certain connexion has been proved with any Indo-Germanic case-system.

§ **391.** I. In proethnic Aryan sprang up a new type of inflexion, in which weak and strong cases of *i̯en*-stems, with the suffix *-in-*, were united into one case-group with cases from *i*-stems, the latter dropping those of their weak cases which had a formative suffix beginning in a consonant, and the nom. acc. sing. neuter. The model for these groups was found in such as *vártman-ē* : *vártma-bhyas vártma*. Non-neuter stems then evolved a nom. sing. in *-ī* on the model of *áśmā*. Compare Skr. *àrcín-* 'shining, beaming': *arcī́ arcí arcín-am arcín-ē arcí-bhyas*, Avest. *kainĭn-* 'girl': *kaini kainin-em kainīn-ō kaini-byō*, O.Pers. *vīϑin-* 'belonging to a clan, native': *vīϑi-biš*; the nom. acc. sing. neut. in *-i* is not actually found in Iranian. In Sanskrit, nom. acc. pl. neut. *arcī́ni*, following *vártmāni*, was added to the list. The pr. Ar. nom. sing. in *-i̯ā -iu̯ā* is

de Courtenay, Einige Fälle der Wirkung der Analogie in der poln. Decl., Kuhn-Schleicher's Beitr. VI 19 ff.: K. Bojunga, Die Entwicklung der nhd. Substantivflexion, Lpz. 1890.

perhaps preserved in Skr. *kanyà* (*kaníyā*) Avest. *kainę* (*-ę* = *-ya*) 'girl, maiden', which kept its *ā*-flexion because it was feminine (cp. below, Skr. *yóṣā* and the like). Compare II § 115 pp. 357 ff.; Streitberg, Paul-Braune's Beitr. XIV 210 ff.; Zubaty, Kuhn's Zeitschr. XXXI 51 f.

In the same period began the transfer of consonant stems to the *o*-class, caused by both having the same ending in the acc. sing. (*-am*), gen. pl. (*-ām*), and possibly the instr. sing. and the nom. acc. dual (*-ā* and *-āu -ā* § 280 p. 184, § 289 p. 196); this went still further in Avestic. Examples: Skr. *pád-a-s pádās* Avest. *pāđaę-ibya* beside the acc. *pád-am pāđ-em* 'pedem', Skr. Ved. *pūṣáṇ-a-s* beside acc. *pūṣáṇ-am* (the name of a god), *dánt-a-s* beside acc. *dánt-am* 'tooth', *áśnāiš* beside instr. sing. *áśn-ā*, stem *áśan-* 'stone', Avest. *ātarāiš* beside acc. *ātar-em* 'fire'. More examples from the Avesta are given by Bartholomae, Ar. Forsch. I 94 f., and in his Handbuch, pp. 100 f. In India, this process made great strides in the popular dialects, and had a great deal to do with the loss of consonant declensions in this group; see Lassen, Inst. Ling. Pracr., pp. 314 ff.; E. Kuhn, Beitr. zur Pali Gr., pp. 67 ff.

Again, in Aryan were formed from **ušās* = Skr. *uṣás* 'dawn' (*s*-stem) the acc. sing. **ušām* = Skr. *uṣám* Avest. *ušąm* and acc. pl. **ušās* = Skr. *uṣás* Avest. *ušå*, on the analogy of stems with *ā* in the root (cp. e. g. Skr. *-sthá-s* 'standing': *-sthá-m -sthás*). Similarly, we find Skr. *jarám jaráyāi* from *jarás-* 'age', and others. Compare further Skr. acc. *yóṣām* dual *yóṣē* from nom. *yóṣā* 'maiden', which is an *n*-stem (pl. *yóṣaṇ-as*), following the stem *áśvā-*; O.Pers. *taumā-* 'family' beside Avest. *taoxman-*, and the like, II § 114 Rem. 1 p. 348, § 117 Rem. 2 p. 369; but conversely the Avest. nom. sing. *šōiþra-pā* 'guardian of the land' (pr. Ar. *-pās* and *-pā*, I § 556. 3 p. 411), because it had the same ending as the nom. sing. of *n*-stems, was the origin of the nom. pl. *-pān-ō*.

Similarly, *vant*-stems changed into *van*-stems (e. g. Skr. *ṛk-vant-* and *ṛk-van-* 'singing' Avest. *ama-vant-* and *ama-van-* 'powerful' (see Bartholomae Kuhn's Zeitschr. XXIX 540 f.)

because the pr. Ar. nominative ending *-*vās* had a variant *-*vā*, a sentence-doublet. See § 198 pp. 78 f. Again, we have Ved. *vidván-as* from nom. sing. *vidvā́s vidvā́n* 'knowing' because of a prehistoric **vidvā́*, a sentence doublet of **vidvā́s* (§ 193 p. 73), and others of the same sort.

The pr. Ar. ending *-*uš* in the nom. sing. (§ 193 p. 73) drew some cases of the perf. part. act. over to the *u*-flexion; e. g. Skr. *pērú-m* from *pērúṣ* 'pressing through' *jigyú-bhiṣ* from *jigyúṣ* 'victorious', Avest. *jagāurū-m* from *jagāurūš* 'watchful'.

The Aryan *napāt-* 'descendant' became gradually more and more completely assimilated in flexion to other names of kindred, such as *bhrātar-* 'brother', see § 390 Rem. 2; with this change compare Skr. gen. sing. *pátyur* 'of a husband' (*páti-*) *jányur* 'of a wife' (*jáni-*), following *bhrā́tur mātúr* etc.

§ **392.** In Sanskrit, *ī-* *i̯ē*-stems, *ū-* *u̯ō*-stems, and feminine *i-* and *u*-stems followed the track of *ī-* *i̯ē*-stems in some of their cases. Sing. gen. *dhiyā́s nadiyā́s bhruvā́s śvaśruvā́s*, dat. *dhiyāí* etc., loc. *dhiyā́m* etc.; and *ávyās ávyāi ávyām*, *dhēnvā́s dhēnvāí dhēnvā́m*. See §§ 231—233, 249—250, 255, 266—268. The cause of these re-formations was that the instr. sing. had the same formation in these classes, as *dhiyā́ ávyā* like *dēviyā́ bṛhatyā́* (nom. *dēvī́ bṛhatī́*). Compare further the acc. pl. *ávīṣ dhēnū́ṣ* like *bṛhatī́s* (§§ 330—331) and the gen. pl. *dhīnā́m bhrūṇā́m nadī́nām śvaśrūṇā́m* like *bṛhatīnā́m -ī́nām* (§ 354). Thus, by proportional analogy, fem. *i-* and *u*-stems kept in these cases a sign of their gender.

Remark. I give only the *ī-* *i̯ē*-stems as the model for this formation because I do not consider it has been proved that the pre-Aryan period possessed *ū-* *u̯ō*-stems made on the same lines. A different account is given by J. Schmidt, Pluralb. 54 ff.

§ **393.** A large number of Sanskrit *i-*, *u-*, and *r*-stems inserted between stem and inflexion an *-n-*, which came from Indo-Germanic *n*-stems. The *n*-stems had brought about in proethnic Indo-Germanic a transformation of the gen. pl. of *ā-*, *o-*, and *ī-* *i̯ē*-stems and of the nom. acc. pl. neuter of *o*-stems, which then spread to the *i-*, *u-*, and *r*-stems:

pr. Ar. *-ānām* and *-īnām* (*i̯ē*-stems), then *-īnām* (*i*-stems), *-ūnām*, Skr. *-ī̆ṇām* (§§ 345—349, 351); Skr. *-āni -īni -ūni -ī̆ṇi*, Avest. *-ēnəg* (§§ 338—339, 341). Then again, Sanskrit *i-* and *u*-stems along with their instr. sing. in *-yā* and *-vā* adopted another in *-inā* and *-unā*, herein following the type of forms from *i̯en-* and *u̯en*-stems, as the masc. neut. *arcín-ā* neut. *áyun-ā*. This was all the more natural because from an early period there had been some few pairs of stems, parallel and having the same meaning, one in *-i-* or *-u-* and one in *-i̯en-* or *-u̯en-*; e. g. *áyu-* and *áyun-* (**āivan-*). There was a reason why the *n*-ending should gradually take the place of *-yā -vā* in the masculine and neuter instrumental (the change is not complete in Vedic, where there is variation still; see §§ 278—279 pp. 181 ff.). The reason was that *-yā* and *-vā*, viewed in connexion with forms like *ávyās -yāi -yām dēnvás -vāí -vám*, was taken to belong to the feminine (cp. § 392); and *-inā -unā* were welcome as distinguishing the masculine and neuter from them. The *-n-* spread still further in the cases of the neuter, and here it included *r*-stems, as sing. gen. abl. *śúcin-as cáruṇ-as dhātī́ṇ-as*, dat. *śúcin-ē* etc., loc. *śúcin-i* etc., dual nom. acc. *śúcin-ī* etc., gen. loc. *śúcin-ōš* etc.; this formation is the regular one for *i-* and *u*-stems in classical Sanskrit. The reason for this mutation of form is to be found in the nom. acc. singular and plural: on noticing the parallelism of *śúci cáru* (*dhātī́*) *śúcīni cárūṇi* (*dhātī́ṇi*) and (e. g.) *arcí arcī́ni*, *vártma vártmāni*, what more natural than to supplement instr. neut. *śúcinā cáruṇā* (*dhātī́ṇā*) by the other cases enumerated, on the analogy of *arcín-as vártman-as* etc.? Thus in this instance the *n*-flexion becomes a sign of the neuter. Compare J. Hanusz, Über das allmälige Umsichgreifen der *n*-Declination im Altindischen, Vienna 1885.

§ **394.** II. Armenian. A characteristic of this language is the disappearance of the special neuter case-forms and of the feminine declensions (such as *nu*, gen. *nuo-y*, 'daughter-

in-law' beside Skr. *snuṣā́*). How these losses came about is not clear; and no less obscure are many heteroclite forms, and mutations of stem running through whole case-systems: e. g. (1) heteroclites: nom. *pokʷr* 'little' gen. *pokʷu* pl. nom. *pokʷun-kʷ*; (2) Stems changed: *amis* 'month' *hur* 'fire' are declined in the *o*-class, contrast Gr. *μην(ν)-* and *πῦρ*.

§ **395.** III. Greek. (1) In *ī-* *i̯ē*-stems, *-i̯ā-* takes the place of *-i̯ē-* (cp. the footnote on p. 68), as gen. *δΐᾱς* Ion. *δΐης* (nom. *δῖα*), *μιᾶς* (nom. *μία*) in contrast with Lith. *dëvĕs*; this change in later times went further, and caused the nom. acc. sing. to be assimilated to *i̯ā*-stems, *ἑταίρᾱ* instead of **ἕταιρα* etc. (II § 109 p. 333, III § 191 p. 69). (2) We see new paradigms like *ὄνομα ὀνόματος* etc., *ἧπαρ ἥπατος* etc. (II § 82 p. 250, § 144 p. 350, § 116 pp. 364 f., § 117 p. 370, III § 244 p. 142); and a wider application of the *τ-* and of the *δ-* and *ϑ*-flexion, the history of which is not yet fully cleared up, e. g. *τέρατ-* beside *τέρας τεράων*, *γέλωτ-* beside *γέλως γελάσ-σαι* (II § 134 p. 425) following *ἀγνώς -ῶτ-ος*, *ἴδριδ-* beside *ἴδρι-ς ἴδρι-ν*, *ἔριδ-* beside *ἔρι-ς ἔρι-ν*, *ὄρνῑϑ-* beside *ὄρνῐ-ς*. (3) In the comparative, *i̯en*-cases find favour at the expense of those with *-i̯es-*, as *ἡδίων* (II § 135 pp. 429 f.). (4) *u̯es-* and *u̯et*-cases are combined to make up the system of the perfect participle active (II § 136 pp. 439 f.; 443 f.). (5) In *i̯en*-stems, the weak form *-ῑν-* becomes the only one, as *δελφῑν-*, and there are new singular nominatives in *-ῑς* and *-ῑν* (II § 115 p. 359). (6) The declension *λέων -οντος* instead of **λέονος*, following *φέρων -οντος* and the rest (II § 114 p. 350; compare III § 198 p. 78). (7) Cases from masc. *es*-stems are made like *ā*-stem cases, and *vice versa*, — due to the nom. sing. (*-ēs* : *-ās*): as Att. *Σωκράτην -κράτου* (*Σω-κρατες-*), Lesb. *Ἑρμο-γένης -η -ῃ -ην -ε* (*Ἑρμο-γενεσ-*), like *Ὀρέστᾱς* etc.; and for the opposite process Att. *Στρεψιάδους Στρεψίαδες* (*Στρεψιαδᾱ-*), Ion. *δεσπότεα* (*δεσποτᾱ-*) (see § 209 p. 88, § 220 p. 97, § 229 pp. 115 f., § 237 pp. 128 f.); and the Lesb. Boeot. Dor. feminines in *-ώ -ῳ* (*Λᾱτώ*) take the inflexion *-ω -ως -ῳ -ων* under the influence of the same

ā-flexion (*-ᾱ -ᾱς -ᾱ -ᾱν*). (8) *μέγας* and *μέγαν* beside the neut. *μέγα* (whether this be from **megn̥* or **megn̥t*), following *ἡδύ-ς ἡδύ-ν : ἡδύ*, *ἴδρι-ς ἴδρι-ν : ἴδρι*.

The class of feminines in *-ώ -ῴ* mentioned just above show very many varieties of flexion (voc. *Λητοῖ*, acc. Cret. *Λᾱτών* Ion. *Λητοῦν* Att. *Λητώ*). They are regarded by some as being originally *ōi̯*-stems. Hitherto nothing has been found outside the Greek language with which they may be connected. Compare Danielsson, Om de grekiska substantiverna med nominativändelsen *-ώ*, Upsala univ. årsskrift 1883; J. Schmidt, Kuhn's Zeitschr. XXVII 374 ff.

§ **396.** IV. Italic.[1]) A characteristic of this branch is the mixing and confusion of consonantal with *i*-stems. This was caused by ancient doublet stems, as *noct- nocti- civitāt- civitāti-* (II § 102 pp. 308 ff.). Beginning in proethnic Italic, this confusion went on in Latin for centuries after the Christian era. Examples: *i*-stem forms are abl. sing. Lat. *air-īd bov-īd praesent-ī* Umbr. peř-i *pers-i* 'pede' Osc. *praesent-id* 'praesente', dat. abl. pl. Lat. *ferent-ibus* Osc. *lig-is* 'legibus', Lat. nom. *ferent-ēs ferent-ia* gen. *ferent-ium*, nom. *carn-i-s* beside *caro*, *juven-i-s*, loc. Osc. Diúv-eí (cp. § 249 p. 151), gen. Osc. maatr-eís Umbr. *matr-er* 'matris'; while from consonant stems we have Lat. acc. *ovem* gen. *ovĭs* abl. *ovĕ* beside nom. *ovi-s*, gen. *opum vātum* beside *api-um vāti-um*. See II § 93 p. 281, and III §§ 211 ff. under the separate cases. In Latin, abl. *-ī* gen. *-ium* nom. acc. *-ia* were most favoured by adjectives, but even in adjectives there was a good deal of irregularity. A clear resumé of the most important facts is given in the Latin Grammar of Schweizer-Sidler and Surber, I² pp. 105 ff.

§ **397.** Lat. *vetus* (acc. *veter-em*), an attribute of masc. and fem. substantives, was originally a neuter substantive (II § 132 p. 417). A new explanation is given by Thurneysen, Kuhn's Zeitschr. XXX 485 f., but to my mind not convincing. Compare *Venus* (*Venerem*) f., originally neuter, 'charm of love'.

1) Ásbóth, Die Umwandlung der Themen im Lat., Gött. 1875.

There are a number of metaplastic forms which follow the *es*-stems; e. g. *su-er-is su-er-e* beside *su-em*, *bov-er-um* beside *bov-em*, *lapid-er-um nuc-er-um* and others, recalling *āns-er-* and the spread of *-es-* in Germanic (II § 132 pp. 419 ff.).

Remark 1. Perhaps the following is the explanation of *āns-er-*. There may have been in pr. Lat. both **hans-* and **hanes-* used together (cp. II § 132 pp. 412 f., § 160 p. 485), and the acc. *(h)anser-em* may have been made through the influence of (say) a gen. **(h)ans-is* and an acc. **(h)aner-em*. *-er-* may easily have spread to other words before the declension of *ānser* was fixed as we have it.

The endings *-ōrum* and *-ārum* may have helped to make *-er-* a favourite suffix in the gen. plural, as it was (*boverum* etc.).

The plurals *spēr-ēs vīr-ēs* (perhaps pre-Italic *s*-stems; see II § 134 p. 424; Kretschmer, Kuhn's Zeitschr. XXIX 170; J. Schmidt, Pluralb. 385) were coined for the sing. *spē-s vī-s*, because the plural nominatives which belonged to these, *spēs vīs*, need not be plural, as far as form went, and so often failed to convey a clear meaning (cp. Osthoff, M. U. IV 238 f.). The heteroclite flexion was supported by *flōs flōr-ēs* (stem *flōs-*), and other like forms.

jecur, *jecinor-is* instead of **jecin-is*, *iter*, *itiner-is* instead of **itin-is*. Compare II § 114 pp. 346 f., and p. 352.

No sufficiently clear explanation has yet been found of the origin of *sēdēs -is*, *pūbēs -is* (*es*-stem in the nom. sing.), as contrasted with *Cerēs -er-is*, *pūbēs -er-is*.

Remark 2. The accusatives *plēbem famem*, ad-formates of *aciem*, should be noted; see § 220 p. 97. Further, if the Vedic genitives *uṣás ǵhas* have really lost a gen. suffix *-s* (see § 237 Rem. p. 128), the question must needs be asked — is the *-is* of gen. *pūbis* for **-es-s*? Lastly, it must be remembered that the word *sēdēs* apparently contaminates two stems, *sedes-* and *sēdi-* (the Author, Kuhn's Zeitschr. XXIV 44, J. Schmidt, Plur. 146). Compare also Thurneysen, Kuhn's Zeitschr. XXX 489; he opposes, and rightly, Schmidt's hypothesis that *-ibus* cames from **-ez-bhos*, but he can hardly be right in his own conjecture that in proethnic Indo-Germanic *es*-stems had an acc. in *-ēm* which had grown up in the same way as **d(i)i̯ēm* grew out of **d(i)i̯ēu̯ + m* (see § 221 p. 98).

By degrees the whole *u*-declension was absorbed into the *o*-declension; see § 232 p. 123.

§ 398. V. In Irish, *bh*-cases from consonant stems followed the analogy of the vowel inflexion in prehistoric times, much as happened in Italic (§ 367 pp. 268 f., § 396 p. 286). Compare § 302 p. 203, § 379. 2 pp. 274 f. The original type is still preserved only in the instr. sing. *anmimm*, in which it is indeed not certain whether the ending be **-mn̥-bhi* or **-mn̥-mi* (§ 281 p. 186). It is also uncertain how we are to regard Gall. dat. pl. *μᾱτρε-βο* (§ 374 p. 271).

Adjectival and substantival *i*-stems became separated, in as much as the gen. sing. of the adjectives took the form of *o*-stems; e. g. masc. neut. *maith* 'boni' fem. *maithe* 'bonae', following *mairb mairbe* from *marb* 'dead'. Adjectival *u*-stems had a tendency to pass into the *i*-declension; their plural was declined in this fashion throughout, and the change was doubtless completed even in Old Irish. Just how it came about has yet to be investigated.

We saw that the "dative" *cathir* beside *cathraig* was doubtless due to the analogy of *athir* (§ 262 p. 164); but these guttural stems in their turn influenced the names of kindred, so that we find e. g. pl. *uasal-athraig* 'high fathers, patriarchs' instead of *-athir*.

§ 399. VI. In the pre-dialect period of Germanic, a new type of declension arose by the levelling of *i̯en*-stems down to the weak form *-īn-*; e. g. Goth. *gamáinī* O.H.G. *gimeinī* 'community' (cp. Lat. *commūniō*). The nom. sing. pr. Germ. **-īn* follows the model of **tuəgōn*. Compare II § 115 pp. 361 f.; Streitberg, Paul-Braune's Beitr. XIV 221 ff. This *i̯en*-class perhaps absorbed old *i̯ē*-stems in West Germanic, by reason of their having some endings in common, e. g. the dat. *digī-m* gen. *digīno* (see § 347 p. 249, § 382 p. 277) as compared with *gimeinīm gimeinīno*.

In the same period the *ī-* *i̯ē*-stems had not only cases with *-ī-* (Goth. nom. sing. *-i* etc.), but doubtless cases with *-i̯ē-* also. Gothic dropped these entirely, replacing them by forms with *-i̯ā-*, as *mavi* 'girl' *máujōs* etc. like Gr. *ἡδεῖα*

ἡδείᾱς etc. (cp. footnote on p. 68). On the other hand, the *i̯ē*-cases were sometimes kept in West Germanic; e. g. O.H.G. sing. acc. gen. *kuninginne -a* pl. nom. acc. *-ā*, and it is only here that the old dat. instr. pl. in *-ī-m* seems to survive. Compare the fluctuation between *-i̯ē-* and *-i̯ā-* in Latin, as *intemperiēs -iem -iē*, but gen. dat. sing. *-iae*, pl. *-iae -iarum* etc.

Root Nouns ending in a consonant, and nouns of more than one syllable ending in an explosive, have in all dialects their old consonantal flexion intermixed with *o-*, *u-*, or *i*-cases; as Goth. *frijōnd-a-m* beside nom. pl. *frijōnd-s* 'friends', A.S. O.Sax. *fōt-u-m* O.H.G. *fuaz-u-m* (and O.Sax. *fuot-i-n* O.H.G. *fuaz--i-m*) beside nom. pl. A.S. *fēt* O.H.G. *foaz* 'feet', Goth. *baúrg--i-m* beside nom. pl. *baúrg-s* 'fortresses, cities'. Sometimes words of this kind will be absorbed entirely into some vowel declension, as Goth. *fōt-u-s*, whose inflexion in the historic period cannot be in any way distinguished from that of *sunu-s*. A great many facts bearing on this point are collected by Kahle, Zur Entwickelung der consonantischen Declination, Berlin 1887. The point of contact with the *o*-class was the gen. pl., as Goth. *frijōnd-ē* O.H.G. *friunt-o*, and perhaps the acc. sing. (see § 219 pp. 96 f.), and in West Germanic the gen. sing. in *-es* as well; contact with the *u*-class took place in the acc. sing. and pl. in *-u(n) -uns*, as Goth. *fōt-u fōt-uns*. But the origin of *i*-cases which dated from the oldest period is doubtless to be sought in the fact that certain nouns had always shown double forms of the formative suffix, *-ti-* and *-t-* (perhaps Goth. *baúrgi-* is also an original variant of *baúrg-*, cp. Gall. *brigi-* in *Brigiani* etc.); besides which, in later times different cases had come to possess the same ending as *i*-stems had for those cases; then came in O.H.G. the transfer of *u*-stems to the *i*-class, which did not except even those *u*-cases which were themselves due to analogy. The earliest change — as early as proethnic Germanic — was the transfer of nom. sing. and dat. instr. pl. of consonant stem into the vowel class, which was caused by a desire to restore the agreement of the stem with the other cases after it had become disguised by phonetic

change; compare, for example, Goth. *frijōnd-s* instead of **frijōns*, *reik-s* instead of **reihs*, *tunþ-um* instead of **tum* for **tun(d)-mi *tumm(i)* (cp. *tigum* 'decadibus' for **tezun(d)-mi*, § 379 p. 275). The pr. Germ. re-formation of the instr. pl. in *-um(i)* on the analogy of *-un* (acc. sing.) and *-uns* (acc. pl.) was natural enough because *r*-stems had both *-ru-m(i)* (= *-r̥-mi*) and *-r-uns* in their case-sytem. The systems of cases which were produced on the lines here indicated, which had consonant-cases and vowel-cases intermixed, sometimes reacted upon systems consisting wholly of vowel-cases and caused consonant-cases to appear amongst them: Goth. gen. pl. *anstē* (stem *ansti-*) following *baúrg-ē naht-ē*, O.H.G. gen. dat. sing. *anst* (beside *ensti*) following *naht*; more of the same kind may be found in Anglo-Saxon, as *zāt* 'goat' etc. Compare Lith. gen. pl. *krūt-ū* beside *krūtì-s* and the like, § 402.

Far fewer metaplastic cases are to be found in polysyllabic *n-* and *r*-stems; examples are Goth. *aúhsn-a-m* following *aúhsn-ē* : *vulfē vulfa-m* (cp. Lith. dial. *akmenám akmenaĩ* following *akmen-ū* § 350 p. 252), *brōþrjus* following *brōþru-m* : *sunu-m sunjus.*

The nom. sing. Goth. *mēna* O.H.G. *māno* and O.H.G. *nefo*, which came from forms ending in **-ōt* (§ 198 p. 79) drew all the other cases into the *n*-class. The same kind of thing may be seen in Pali; see E. Kuhn, Beitr. zur Pali-Gr. 69, Torp. Die Flexion des Pali p. 25: for example, the nom. sing. *maru* = Skr. *marút* brought all the cases of this stem into the *u*-class (nom. pl. *marū*).

§ **400.** Adjectives combine forms from *i-* and *i̯o*-stems. Hence the inflexion of Goth. masc. fem. *hráins* neut. *hráin*, masc. gen. *hráinis* acc. *hráinjana* dat. *hráinjamma* etc. The nom. sing. fem. neuter and gen. sing. masculine are distinct *i*-forms, and *hráinjana* and the rest distinct *i̯o*-forms. The amalgamation of these two stems was due to the fact that in the nom. (acc.) sing. masc. *i̯o*-stems like *un-nutja-* 'useless' had the weak form of the suffix, and the ending **-i-s* (**-i-m*

in the acc.) coincided with that of *i*-stems. In West Germanic the *i̯o*-declension absorbs the other.

Side by side with the proethnic Germanic system of adj. *i*-stems developed the adj. *u*-stems, as Goth. *kaúru-s* = Skr. *gurú-ṣ*. In the feminine, **kuru̯-i̯ō-* **kuri̯ō-* became Goth. *kaúrjō-* (II § 110 pp. 334 f.), and a masc.-neut. **kuri̯a-* = Goth. *kaúrja-* was formed as part of the same system (cp. *bērusjōs* II § 110 p. 338). Following the masc. nom. *hráins* acc. *hráinjana* and neut. *hráin* we have the group *kaúrus kaúrjana kaúru*, and as *hráins* could be used for the feminine, *kaúrus* now came to be used in the same way instead of **kaúrvi*, unless indeed this use is proethnic (cp. II § 110 pp. 334 f.). These stems too are declined in West-Germanic according to the *i̯o*-class.

§ **401.** Another characteristic system of West Germanic is that exemplified by O.H.G. *kalb kalbes* pl. *kalbir*, A.S. *cealf cealfes* pl. *cealfru* (cp. Russ. *čudo* pl. *čudesa* § 404). See II § 132 pp. 420 f.

On certain metaplastic processes connected with change of gender, consult V. Michels, Zum Wechsel des Nominalgeschlechts im Deutschen, I, Strassb. 1889.

§ **402.** VII. Balto-Slavonic. Here too it is remarkable how the consonant declension has been absorbed into the vocalic. Even in the earliest records of the language this change may be seen already far advanced. Russian, for example, has been for centuries without a single case of the old consonant declension, with the exception of the *s*-stem nom. acc. in *-o*, and the *n*-stem nom. acc. in *-ja* (O.C.Sl. *-ę*). And certain Lithuanian dialects in their present state have scarcely any consonantal forms left.

With a few scattered exceptions, the loc. pl., and the cases with *m*-suffixes, from consonant stems, were inflected as *i*-stems in proethnic Balto-Slavonic: e. g. Lith. *akmen-y-sè* (earlier **-i-se*) O.C.Sl. *kamen-ĭ-chŭ*, *akmen-i-mì kamen-ĭ-mĭ*, *-ì-m -i-mm̃ -ĭ-ma*, *-ì-ms -ĭ-mŭ*, *-i-mìs -ĭ-mi*. Here, as in so many other reformations (cp. for example § 360 p. 262), something is

certainly due to the desire to keep the stem final distinct, and the change of consonant stems to *i*-stems was suggested by the occurrence of certain words which had had consonant stems and *i*-stems as variants from an early period, such as Lith. *deszimt-* O.C.Sl. *desęt-* beside *deszimti-* *desętĭ-* 'decas', Lith. *nakt-* (gen. pl. O.Lith. and in the modern dialect of Godlewa *nakt-ũ*) beside *nakti-* 'nox' (II § 101 p. 306, § 123 p. 390). Starting from these cases, the *i*-flexion next found its way into others, and sometimes it included all of them, its progress being aided by the identity of ending of the two classes in the acc. sing., which was regular, and in Baltic in the acc. plural too (Lith. *-į -is*, O.C.Sl. *-ĭ*), e. g. Lith. *dant-ì-s* 'tooth' O.C.Sl. *jelen-ĭ* 'stag' (II § 93 pp. 283 f.) Since there were a certain number of nouns which made some of their cases from a consonant-stem and some from an *i*-stem, it sometimes happened that these caused old *i*-stems to form consonantal cases; e. g. Lith. dial. gen. pl. *krūtũ pažastũ* from *krūtì-s* 'mother's breast' *pažastì-s* 'armpit' (cp. also Bezzenberger, Beitr. zur Gesch. der lit. Spr., 143 f.), O.C.Sl. nom. pl. *pečat-e* from *pečatĭ* 'signet, seal' (II § 123 Rem. 3 p. 394). Compare Goth. gen. pl. *anst-ē* from the stem *ansti*, and the like, § 399 p. 290.

The *-i̯ē-* of *ī-* *i̯ē*-stems is often interchanged with *-i̯ā-*, and this is especially common in adjectives and participles; e. g. acc. Lith. *vĕžanczią* O.C.Sl. *vezątą* from nom. Lith. *vežantì* O.C.Sl. *vezątĭ* (cp. the footnote on page 68). In connexion with these sprang up, in the masculine and neuter, cases extended by *-i̯o-*, if the stem ended in a consonant, as gen. *vĕžanczio* O.C.Sl. *vezątĭa* from nom. *vežą̃s rezy*. *mìrusio mĭrŭša* from *mìręs mĭrŭ*, O.C.Sl. *slaždĭša* from *slaždĭjĭ* (n. *slažde*). Compare § 368 Rem. p. 269.

§ 403. The first characteristic of Lithuanian which should be mentioned here is the loss of all neuter substantives, most of which became masculine: e. g. *lùnka-s* 'bast, inner bark' = Pruss. *lunka-n* O.C.Sl. *lyko*; *akì-s* f. 'eye' = Skr. *ákṣi*; *medù-s* m. 'honey' = Pruss. *meddo* Gr. *μέθυ*; *sémŭ* (now

only used in pl.) m. 'seed' = O.C.Sl. *sěmę* Lat. *sēmen*; *vandū̃ undū̃* m. 'water' = Goth. *vatō* Gr. *ὕδωρ*; *debes-ì-s* (gen. pl. still *debes-ū*) m. f. 'cloud' = O.C.Sl. *nebo*. In a certain number of words gender may have changed because the ending of the nom. acc. neuter was the same as in masculine words. This is the case with *sėmū̃ vandū̃* m., following *akmū̃* and words like it (§ 223 p. 100, § 224 p. 103), as O.H.G. *namo sāmo* became masc. (Goth. *namō* n.) by the influence of masculines that had the same ending. Certain masculine words with nom. *-as*, gen. *-ō*, correspond to Idg. neuters in **-os* : *mĕnas* 'moon' beside *mĕnes-io* etc. (II § 132 p. 415), *ãkas* 'ice-hole' = O.C.Sl. *oko*, and others (W. Meyer, Die Schicksale des lat. Neutr. 31; J. Schmidt, Plur. 195). Another is perhaps *medùs* beside Skr. *mádhuš* (by-form of *mádhu*) Gr. *μεϑυσ-ϑῆνα*. It is a reasonable conjecture that the stock of neuter words first began to thin in this way, and that afterwards the similarity of inflexion in most of the oblique cases affected the nom. acc. even when they differed in masc. and neut., and replaced the neuter form by one which was masculine or feminine.

The agreement of the dat. sing., nom. acc. dual, acc. gen. pl. *dañgui dangù dangùs dangū* (*u*-stem) with *vìlkui vìlkù vìlkùs vìlkū* (*o*-stem) produced the re-formates *dangůs-nà* and loc. *dangůsè* (§ 326 pp. 227 f.). This change from *u*- to *o*-declension was carried further in dialects: e. g. *sūnaĩ sūnáms sūnaĩs* (cp. Brückner, Arch. für slav. Phil. III 252 f.; the Author, Lit. Volksl. und Märch. 300). In the same way Lettic *u*-stems came to form their plural in the *o*-declension.

r-stems, which had a nom. sing. in *-ė*, followed the analogy of *ī- i̯ē*-stems, which has the same ending; e. g. *intė̃* 'brother's wife' (Skr. *yātar-*) gen. *intės*. See II § 122 Rem. p. 383. Similarly perhaps is to be explained *kekė̃ -ės* 'dove', as being originally a neuter **kekē(r)* (cp. Lat. *cicer*), see § 224 p. 103.

§ 404. In Slavonic, *nomina agentis* in *-tel-* (Idg. *-ter-*) have kept to the old consonantal declension only in the nom. and gen. plural, and not consistently even there; e. g. *datel-e* (also

datelje with *j* from the other cases which have *-lj-*) and *datel-ŭ*; on the analogy of *datel-ŭ* we then have instr. *datel-y* in the *o*-declension. Otherwise they are *i̯o*-stems, nom. sing. *-teljĭ* and so forth. Cases like *datelĭmŭ* may be regarded as the original forms answering to forms like *kamen-ĭ-mŭ* (§ 402), which are responsible for the change from consonant to *i̯o*-stem. See § 368 Rem. p. 269.

The relation between *telę* and gen. *telęte* seems to have been much the same as between Gr. *ὄνομα* and *ὀνόματος*. See § 244 pp. 142 f.

From *graždan-e* 'burghers, citizens' gen. *graždan-ŭ* (II § 115 p. 362), was formed in O.C.Sl. the acc. instr. *graždany* following *vlŭky*, like the instr. *dately*. In the older remains of several Slavonic languages occur plural dat. instr. loc. forms in *-jamŭ -jami -jachŭ* (O.Czech *Polás*), still retaining the old inflexion, in place of O.C.Sl. *-janĭmŭ -jany -janĭchŭ*; see vol. I § 585 p. 441, III § 356 p. 260, § 367 p. 269. The singular of these nouns is extended by *-ino-*, as *graždaninŭ*.

In fem. *ū- uu̯*-stems, the similarity between the ending of gen. *svekrŭv-ŭ* and that of *rąkŭ* produced forms like *svekrŭv-amŭ -ami -achŭ*, following *rąka-mŭ* etc.

voda f. 'water' was doubtless originally a neuter in *-ō(r)*, see § 224 p. 103.

The ending *-o*, nom. acc. sing. of neuter *es-* and *o*-stems, caused a confusion of forms between these two classes, and in particular made *es*-stems pass into the *o*-class, as gen. *slova* instead of *sloves-e* from *slovo* = Gr. *κλέος*, *dĕles-e* instead of *dĕla* from *dĕlo* 'work'. This has made the *s*-declension disappear from modern Slavonic languages, all but a few traces. The declension of the Russian words *čudo* 'wonder' *nebo* 'heaven' should be noticed: sing. *čudo* gen. *čuda* etc. like *selo*, but pl. *čudesa* gen. *čudesŭ* etc. like *sela*, that is, they are like O.H.G. *kalb* pl. *kalbir* (§ 401).

Similarly, *u* and *o*-stems became mixed owing to their like endings in the nom. acc. sing.; and thus all *u*-stems have some *o*-cases, as gen. *syna* instead of *synu*, from *synŭ* 'son' = Lith.

sūnù-s; the reverse is rarer, e. g. *dlŭgu* instead of *dlŭga*, from *dlŭgŭ* 'duty' = Goth. *dulg-s*. In most of the modern Slavonic languages the *u*-stems have in this way been almost entirely absorbed into the more numerous *o*-class.

[Tables of Noun Declension to illustrate §§ 190—404 are given below, pp. 296—319.]

Case-endings transferred from Pronouns to Adjectives.

§ 405. From the proethnic period downwards, there has never been any hard and fast line of demarcation between masculine and feminine pronouns in *-o*, as **to-* 'this, the' (which had in some of their cases different endings from nouns), and nominal adjectives with *o*-stems.

To what extent pronominal endings had spread in the parent language cannot now be made out. Two questions have to be answered. First, was the pronominal inflexion used in any of the forms of certain adjectives, purely nominal in origin, such as Skr. *víśva-* 'each' *sárva-* 'all' Lat. *sōlu-s* O.C.Sl. *vĭsĭ* 'omnis'; and if so, in which? And secondly, where adjectives had *formative* suffixes which were used with both pronouns and nouns, how far were they *declined* after the noun system? For example, although the parent forms of Skr. *an-yá-s* Gr. *ἄλλο-ς* Lat. *al-iu-s* etc. must have belonged to the pronominal declension (we may conjecture that *an-yá-s* is simply *ana-* + *ya-*, as *tya-* is *ta-* + *ya-*, see § 409), it is wholly doubtful how the comparative of **qo-* 'quis' formed with *-tero-* was then declined (Skr. *katará-s* Gr. *πότερο-ς* etc.)

§ 406. It is certain at any rate that neither in Greek nor in Irish has the pronoun declension spread beyond the area it filled in the parent language. Indeed, in these languages the pronouns actually lost the greater number of their proper inflexions.

[Continued on page 320.]

1. *o*-Stems. Appendix to

	Pr. Idg.	Sanskrit.	Avestic.	Armenian.	Greek.
Sing. nom.	*u̯l̥qo-s 'Wolf':	vṛ́ka-s	vehrkō	gail	λύκο-ς
voc.	*u̯l̥qe:	vṛ́ka	vehrka	gail [nom.?]	λύκε
acc.	m. *u̯l̥qo-m:	vṛ́ka-m	vehrke-m	[z gail]	λύκο-ν
	n. *jugo-m 'yoke':	yugá-m	xšaþrem 'lordship'		ζυγό-ν
gen.	*u̯l̥qo-si̯o, -e-si̯o:	vṛ́ka-sya	vehrka-hę	gailo-y (?)	λύκο-ιο λύκου λύκω
	*u̯l̥qe-i̯ -o-i̯?:	cp. mē	cp. mę̄		Thess. χρόνοι cp. μοὶ
abl.	*u̯l̥qōd, -ēd:	vṛ́kād	vehrkāþ	i gailo-y	Lokr. ὦ 'unde [λύκοιο λύκοι λύκω]
dat.	*u̯l̥qōi̯, -ē(i̯):	vṛ́kāya, -dhyāi, sakhyā́	vehrkāi, aša	[gailo-y]	λύκῳ
loc.	*u̯l̥qo-i̯, -e-i̯:	vṛ́kē	vehrkę̄		Att. οἴκοι οἴκε 'at home'
instr.	*u̯l̥qō, -ē:	vṛ́kā, †vṛ́kēṇa	vehrka		Att. πῶ Lak. πη Tar. αἰῆ, [λύκῳ
	*u̯l̥qo-bhi -mi, -e-bhi -e-mi:			gailo-v ardare-v	Ep. θεό-φι
Dual. nom.-acc.	m. *u̯l̥qōu̯ -ō:	vṛ́kāu vṛ́kā	vehrka	erku 'two' (?)	λύκω
	n. *jugo-i̯, -e-i̯:	yugḗ	xšaþrę̄		ζυγώ, ϝεί-κατι
gen. etc.	dat. abl. instr.?	dat. abl. instr. vṛ́kābhyām	dat. vehrkaęibya		λύκοιιν λύκοιν (cp Att. δυεῖν), Arg -οι, El. -οιοις
	gen. *u̯l̥qou̯s?:	gen.loc. vṛ́kayōṣ, cp. pron. ēnōṣ	gen. vehrkayå		
	loc. *u̯l̥qou̯?:		loc. vehrkayō		
Plur. nom.	*u̯l̥qōs:	vṛ́kās vṛ́kāsas	vehrkå vehrkåŋhō, vehrka	gailk̑	†λύκοι
acc.	m. *u̯l̥qo-ns (*u̯l̥qōns?):	vṛ́kā̧s -ān	vehrkąs(-ca) -ąn, vehrka	z gails	λύκονς λύκου
	n. *jugā:	yugā́ yugā́ni	xšaþra, vīspēŋg vīspå 'omnia'		ζυγά
gen.	*u̯l̥qōm, -ēm:	vṛ́kām vṛ́kā̧ṇām	vehrkąm vehrkåną̄m	gailoç	λύκων
loc.	*u̯l̥qoi̯-s -s-u -s-i:	vṛ́kē-ṣu	vehrkaę-šu -šv-a	gailoç	λύκοις λύκοιοι
dat.-abl.	*u̯l̥qo-bh- -m-:	vṛ́kē-bhyas	vehrkaęibyō	dat. gailoç abl. i gailoç	[λύκοις λύκοιοι]
instr.	*u̯l̥qōi̯s:	vṛ́kāiṣ	vehrkāiš		λύκοις | λύκοιοι
	*u̯l̥qo-bhĭ(s) -mĭ(s):	vṛ́kē-bhiṣ	vehrkaęibiś	gailo-vk̑	θεό-φι

1) When any of the forms here given under a certain heading belong in form to a different place, and are h placed according to their meaning (e. g., accusative used for the nominative), they are enclosed in square brackets Spaced type implies that a given form, as far as its case-ending goes, may be counted the regular descendant of

§§ 190—404.

Latin.	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
lupu-s; *Cornēli-s*	*fer* 'man'	*vulf-s*; *unnut-s* 'useless' *hairdeis* 'herdsman'	*wolf*	*vilka-s*; *žõdi-s* 'word', *gai-dỹ-s* 'cock'	[*vlŭkŭ*]; *kraji* 'border'
lupe; *fili*	*fir*	*vulf*; *hairdi*	*wolf*	*vilkè*; *žõdi*, *gaidỹ*	*vlŭče*; *kraju*
lupu-m: *Cornēli-m*	*fer n-*	*vulf*; *háirdi*	*wolf*	*vilką*; *žõdį*, *gaĩdį*	*vlŭkŭ*; *krajĭ*
jugu-m	*dliged n-*	*juk*	*wort* 'word'	†*gẽra*	*igo*
		†*vulfi-s*	†*wolfe-s*	[*vilko*]	[*vlŭka*]
lupī, *fīlī*, cp. *mī*	*fir*				cp. *mi*
lupō(d), *rectē(d)*		*vulfa*(?)	*wolfu*(?) [*wolfe*]	*vilko*	*vlŭka*
lupō Numasiōi	[*fiur*]	*vulfa*(?)	*wolfe*(?)	*vilkui*	*vlŭku*
bellī	*cinn* 'at the end'	*vulfa*(?)	*wolfe*(?)	†*vilkè*, *namẽ* 'at home'	*vlŭcě*
adv. *modo*, *arc*, [*lupō(d)*] *ōlim*(?)	*fiur*	*hve* 'wherewith' *vulfa*(?)	*wolfu* O.Sax. *hwō* cp. *zi houbitun*	*vilkù gerù-ju*	*novĕ-* in *norĕji* *vlŭko-mĭ*
duo	*dáu dò* and *da* 'two', *fer*	*ahtáu* 'eight'	*ahto* 'eight'	*vilkù gerù-ju*	*vluka*
vī-gintī(?)	*dliged*, *dā n-*		O.Sax. *twē*		*izě*
	dat. *feraib*, *dib n-*			dat. *vilkú-m* instr. *vilka-mì*	dat. instr. *vlŭkoma*
	gen. *fer*				gen. *vlŭku*
					loc. *vlŭku*
†*lupi poploc*, cp Osc. Núvlanús 'Nolani'	†*fir*, cp. voc. *firu*	*vulfos*	*wolfu -a*	†*vilkai*, *gerĕ-ji* 'good ones'	†*vlŭci*
lupōs	*firu*	*vulfans*	[*wolfā -a*]	*vilkùs*, cp. Pruss. *deiwans* 'deos'	*vlŭky*
juga	*cēt* 'hundreds', *dligeda*	*juka*	*wort*	*keturió-lika* '14'	*iga*
deum, †*lupōrum*	*fer n-*	*vulfē*	*wolfo*	*vilkū*	*vlŭkū*
lupīs(?), *deivōs*	[*feraib*]	[*vulfam*]	[*wolfum*]	*vilkùsu vilkùsè*	*vlŭcěchŭ*
[*lupīs*, *deivōs*]	[*feraib*]	*vulfa-m*(?)	*wolfum*(?)	*vilkù-ms*	*vlŭko-mi*
lupīs	*feraib*	*vulfa-m*	*wolfum*(?)	*vilkaĩs*	*vlŭky*

ndo-Germanic proethnic form. Pronominal endings transferred to noun stems after the end of the proethnic period, are arked with a dagger †.

2. ā-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Greek.	Latin.
Sing. nom.	*ékuā 'mare':	áśvā	haęna 'hostile host'	χώρᾱ 'land' ἱπ-πότη-ς [ἱππότᾱ] 'charioteer'	equa
voc.	*ékua:	ámba 'mother', áśvē	haęnē	νέμφᾱ δέσποτα	[equa]
acc.	*ékua-m:	áśvā-m	haęnąm	χώρᾱ-ν	equa-m
gen.	*ékuās:	áśvāyās, gnās-(?), [áśvāyāi]	haęnayā	χώρᾱς, νεᾱνίου	viās, viāī equa
abl.	*ékuās:	áśvāyās	haęnayāb	χώρᾱς, νεᾱνίου	equā(d)
dat.	*ékuāi:	suvapatyāí(?), áśvāyāi	haęnayāi	χώρᾳ	Mātūtā, equae
loc.	*ékuāi:	aśvāy-ām	haęnaya	Θηβαι-γενής χώρᾳ	Romae
instr.	*ékuā:	áśvā, †áśvayā	haęna, †haęna-ya	ἀρᾱ, ἀγέλῃφι(ν), [χώρᾳ]	[equā(d)]
Dual. nom.-acc.	*ékuai:	áśvē	haęnę	χώρᾱ, (pl. χῶρᾱι)	duae
gen. etc.	dat. abl. instr.? gen.? loc.?	d. a. i. áśvā-bhyām gen. loc. áśvayōš	dat. haęnā-bya gen. haęnayā	gen. etc. χώραιν	
Plur. nom.	*ékuas:	áśvās, áśvāsas	haęnā (haęnās-ca)	[χῶραι]	[equae]
acc.	*ékuās:	áśvās, [áśvāsas]	haęnā (haęnās-ca)	χώρας χώρᾱς	equās(?)
gen.	?	áśvā-nām	vanąm, haęna-nąm	†θεᾱ́ων χωρῶν	†equā-rum
loc.	*ékuā-s -su -si:	áśvā-su	haęnā-hu -hv-a	ταμίᾱ-σι, χώραισι, χώραις	O.Lat. dat. vā-s, [eq
dat.-abl.	*ékuā-bh- -m-:	áśvā-bhyas	haęnā-byo	[ταμίᾱσι, χώρασι, χώραις]	equā-bus, [eq
instr.	*ékuā-bhī(s) -mī(s):	áśvā-bhiš	haęnā-biš	χώραις, [ταμίᾱσι, χώραισι]	equis, [equā

Oscan.	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
tovto 'civitas'	*tuath* 'people', *ben* 'woman'	*giba* 'gift'	*buoz* 'improvement' [*geba* 'gift']	*rankà* 'hand'	*rąka* 'hand'
Umbr. [*Tursa*]	*tuath*(?) *ben*(?)	[*giba*]	[*geba*]	*rankà*, *mótyn* 'mother'	*rąko*
tovtam	*tuaith n- mnāi n-*	[*giba*], *þō* 'this'f.	*geba*	*rañką*	*rąką*
tovtas	*tuaithe mnā*	*gibōs*	*geba* [*gebu*]	*rañkos*	*rąky*, *duše* 'of a soul'
tovtad				*rañkos*	*rąky duše*
deívaí 'divae'	*tuaith*	*gibái*	[*gebu gebō*]	*rañkai*	*rącė*
víaí 'in via'	*tuaith*	*gibái*	[*gebu gebo*]	*rañkoj-e*	*rącė*
	[*tuaith*]	[*gibái*]	*gebu gebo*	*rankà*	*rąką*, †*rąkoją*
	tuaith, *dī*	*þūsundja*(?)		*rankì gerė-ji*	*rącė*
	dat. *tuathaib mnāib* gen. *tuath ban*			dat. instr. *rañko-m*	dat. instr. *rąka-ma* gen. loc. *rąku*
tovtas	*tuatha mnā*	*gibōs*	*gebā -a*, *kebo*	*rañkos*	[*rąky duše*]
víass 'vias'	*tuatha*(?) *mnā*(?)	*gibōs*	*gebā -a*, *kebo*	*rankàs*, *rankos-nà*	*rąky duše*
†*tovtazum*	*tuath n- ban n-*	*gibō*	*gebōno*, *āleibo*	*rañkū*	*rąkŭ*
	[*tuathaib mnāib*]	[*gibō-m*]	[*gebō-m*]	*rañko-su -se*	*rąka-chŭ*
[Diumpaís]	[*tuathaib mnāib*] cp. Gall. *Ναμαυσικᾶ-βο*	*gibō-m* (?)	*gebō-m* (?)	*rañko-ms*	*rąka-mŭ*
Diumpaís	*tuathaib mnāib*	*gibō-m*	*gebō-m*	*rañko-mis -mi*	*rąka-mi*

3. *ī- i̯ē*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Greek.	Latin.
Sing. nom.	**bhr̥ĝhn̥t-ī* 'celsa':	*bṛhatī́*	*barenti* 'ferens'	*φέρουσα* 'ferens' *πότνια* 'lady'	*faciē-s, suāvi-*
voc.	?	*bṛ́hati*	*barenti*	*φέρουσα*	[*faciē-s*]
acc.	**bhr̥ĝhn̥tī-m*: **bhr̥ĝhn̥t(i)i̯-m̥*:	*bṛhatī́-m*	*barentī-m*	*πόλῑ-ν φέρουσαν πότνιαν*	*suāvem faciem* (?)
gen.	**bhr̥ĝhn̥t(i)i̯ēs*:	*bṛhatyā́s* [*bṛhatyāí*]	*barentyā̊, -yō*	*φερούσης*	*facies, faciē facii*, [*faciē*
abl.	**bhr̥ĝhn̥t(i)i̯ēs*:	*bṛhatyā́s*	*barentyā̊*	*φερούσης*	*facie(d)*
dat.	**bhr̥ĝhn̥t(i)i̯ē(i̯)*:	*bṛhatyāí*	*barentyai*	*φερούσῃ*	*facie, faciēi facii*
loc.	**bhr̥ĝhn̥t(i)i̯e(i̯)*	*bṛhatyā́-m*	*barentya*	*φερούσῃ*	*facie*
instr.	**bhr̥ĝhn̥t(i)i̯ē*:	*bṛhatyā́*	*barentya*	[*φερούσῃ*]	*facie* (?)
	**bhr̥ĝhn̥tī*?:	*bṛhatī́*	*azī*		
Dual. nom.-acc.	**bhr̥ĝhn̥tī*?:	*bṛhatī́, -iyāu -yāù*	*barentī*	*φερούσᾱ*	
gen. etc.	dat. abl. instr.?	dat. abl. instr. *bṛhatī-bhyām*	dat. *barenti-bya*	gen. etc. *φερούσαιν*	
	gen. **bhr̥ĝhn̥t(i)i̯ou-s*?: loc. **bhr̥ĝhn̥t(i)i̯ou̯*?:	gen. loc. *bṛhatyṓš*			
Plur. nom.	**bhr̥ĝhn̥t(i)i̯ēs*:	*bṛhatī́š, -iyas -yàs*	*barentīš, -yō*	*φέρουσαι*	*faciēs*
acc.	?	*bṛhatī́š, -iyas -yàs*	*barentīš, -yō*	*φερούσᾱς*	*faciēs*
gen	**bhr̥ĝhn̥t(i)i̯-ōm*?:	*bṛhatī-nā́m*	*barenti-nąm*	†*μουσᾶων φερουσῶν*	†*faciērum*
loc.	**bhr̥ĝhn̥tī-s -su -si*:	*bṛhatī́-šu*	*barenti-šu -šv-a*	*φερούσησι -ησι -αισι* [*-αις*]	[*faciē-bus*]
dat.-abl.	**bhr̥ĝhn̥tī-bh- -m-*:	*bṛhatī-bhyas*	*barenti-byō*	[*φερούσησι -ησι -αισι -αις*]	*faciē-bus*
instr.	**bhr̥ĝhn̥tī-bhĭ(s) -mĭ(s)*:	*bṛhatī́-bhiš*	*barenti-biš*	*φερούσαις* [*-ησι -αισι*]	[*faciē-bus*]

Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
inis 'island' *sī* 'ea'	*frijōndi* 'friend' f.	*gutin gutinna* 'goddess'	*vežantì* 'vehens' *žẽmė* 'earth'	*vezątši* 'vehens' *zemlja* 'earth'
	frijōndi	*gutin*	[*žẽmė*]	*zemlje*
inis n- (?) *insi n-* (?)	*frijōndja*	*gutinne -a*	*vežanczią žẽmę*	*vezątą zemlją*
inse (?)	*frijōndjōs*	*gutinne -a*	*vežanczíõs žẽmės*	*vezątę zemlję*
			vežanczíõs žẽmės	*vezątę zemlję*
insi	*frijōndjái*	[*gutinnu*]	*vẽžanczíai žẽmei*	*vezątši zemlji*
insi	*frijōndjái*	[*gutinnu*]	*vẽžanczioj-e žẽmėj-e*	*vezątši zemlji*
insi (?) *inis* (?)	[*frijōndjái*]	*gutinnu*	*vẽžanczia žemė*	*vezątą* (†-*eją*) *zemlją* (†-*eją*)
inis			*vežantì-dvi žemì*	*vezątši zemlji*
dat. *insib*			dat. *vežanczióm-dvėm* instr. *vežanczíom-dvėm* dat. instr. *žẽmė-m*	dat. instr. *vezątša-ma zemlja-ma*
				gen. *vezątšu zemlju*
				loc. *vezątšu zemlju*
insi (?)	*frijōndjōs*	*gutinne*	*vẽžanczios žẽmės*	[*vezątę zemlję*]
insi	*frijōndjōs*	*gutinne*	*vẽžanczias žemės žemės-nà*	*vezątę zemlję*
inse n-	*frijōndjō*	*gutinno, -innōno*	*vežanczíū žẽmiū*	*vezątšī zemljī*
[*insib*]	[*frijōndjō-m*]	[*gutinnō-m, digī-m*]	*vežanczio-su -sė žẽmė-su -se*	*vezątša-chŭ zemlja-chŭ*
[*insib*]	*frijōndjō-m* (?)	*gutinnō-m* (?), *digī-m* (?)	*vẽžanczio-ms žẽmė-ms*	*vezątša-mŭ zemlja-mŭ*
insib	*frijōndjō-m*	*gutinnō-m, digī-m* (?)	*vežanczio-mìs žẽmė-mis -mi*	*vežątša-mi zemlja-mi*

4. *i*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Armenian.	Greek.
Sing. nom.	**ou̯i-s* 'ovis':	*ávi-ṣ*	*ažī-š* 'snake'	*sirt* 'heart'	*ὄφι-ς* 'snake'
voc.	**ou̯oi̯ -ei̯*: **ou̯i*:	*ávē*	*ažē* *ažī*	*sirt* [nom.?]	*ὄφι*
acc.	**ou̯i-m*: n. **oqi* 'eye':	*ávi-m* *śúci* 'pure'	*ažī-m* *būiri* 'much'	[*z sirt*]	*ὄφι-ν* *ἰδρι* 'clever'
gen.	**ou̯oi̯-s -ei̯-s*: **ou̯(i)i̯-es -(i)i̯-os*:	*ávē-ṣ* *ávy-as ariy-ás*	*ažōi-š*, *jainy-ōiš*, *vay-ō*	*srti*(?)	*ὄφεος -εως*, *πόληο* *ὄφι-ος*
abl.	**ou̯oi̯-s -ei̯-s*: **ou̯(i)i̯-es -(i)i̯-os*:	*ávē-ṣ* *ávy-as ariy-ás*	*ažōiþ ažaęđ-a*	*i srtē*	*ὄφεος -εως*, *πόληο* *ὄφι-ος*
dat.	**ou̯ei̯-ai̯ *ou̯(i)i̯-ai̯*: also **ou̯ī*?:	*ávay-ē páty-ē* *ūtī*	*ažayaę-ca*, *paiþyaę-ca* *fra-mrūiti*	*srti*	[*ὄφει, πόλῃ πόλ* *βάσι*
loc.	**ou̯ēi̯ -ē, -ei̯*(?): **ou̯ei̯-i*:	*ávā ávāu* *ājáy-i*(?)	*ažamrūitē*(?)		*πόλῃ πόλη* *ὄφεῖ ὄφει*
instr.	**ou̯ī*:	*matī* f., *ávyā* f. (Ved. also m.), *ávi-nā* m. (Ved. also f.)	*ažī*	*srti-v*	Ion. *βάσι* [*ὄφε πόλῃ πόλη*]
Dual. nom.-acc.	**ou̯ī*: neut. **oqī*:	*ávī* *śúcī*, *śúcinī*	*ažī* *aši*		*ὄφει ὄφεε* *ὄσσε*
gen. etc.	dat. abl. instr.? gen. **ou̯(i)i̯-ou̯-s*?: loc. **ou̯(i)i̯-ou̯*?:	dat. abl. instr. *ávi-bhyām*, neut. *akṣī-bhyām* gen. loc. *ávy-ōṣ*	dat. *aži-bya*		gen. etc. *ὀφέοιν*
Plur. nom.	**ou̯ei̯-es*:	*ávay-as*, *ary-ás*	*ažay-o*, *fra-vašy-ō*	*sirtk'*	*ὄφεις* Cret. *τρ* *-ες*
acc.	**ou̯i-ns* (**ou̯īns*?): neut. **trī* 'tria':	*ávīr -īn* m., *ávīṣ* f., *ary-ás* *trī*, *tríṇi*	*ažīš* m., [*garayō*] *hu-baođi*	*z sirts*	*ὄφεις*, *πόδας*, [*ὄφεις*] *τρία*
gen.	**ou̯(i)i̯ŏm*:	*ávīnām*, *sūrīm*	*kaoyąm*, *vayąm*, *ažinąm*	*srtiç*	*τριῶν*, *ὄφεων*
loc.	**ou̯i-s -su -si*:	*ávi-ṣu*	**ažī-šu*	*srtiç*	*ὄφισι*, *ὄφεσι*
dat.-abl.	**ou̯i-bh- -m-*:	*ávi-bhyas*	*aži-byō*	d. *srtiç*, a. *i srtiç*	[*ὄφισι*, *ὄφεσι*]
instr.	**ou̯i-bhĭ(s) -mĭ(s)*:	*ávi-bhiṣ*	**ažī-biš*	*srti-vk'*	[*ὄφισι*, *ὄφε ν*]

Latin.	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
turri-s	*fāith* 'vates'	*anst-s* 'favour'	*anst* 'favour', *kuri* 'choice'	*naktì-s* 'night'	*noštĭ* 'night'
[*turris*]	*fāith* (?) *fāith* (?)	*anst*	*anst kuri*	*naktẽ*	*nošti*
turri-m, *ovem* *mare*	*fāith n-* *muir* (*n-*) 'mare'	*anst* *hráin* 'pure'	*anst kuri* *meri* 'mare'	*nãktį*	*noštĭ*
turris, Osc. *-eis*	*fātho -a*	*anstái-s*, *gastis* 'of a guest'	*ensti* (?), *gastes* 'of a guest' *ensti* (?)	*naktẽs*	*nošti*
turrī(*d*)				*naktẽs*	*nošti*
		[*anstái*, *gasta*]	[*gaste*]	*nãkcziai*, *vãgiui* 'furi'	
turrī (?)	*fāith*		*ensti kuri* (?)	*vësz-paty*	*nošti*
ove turrī (?) *turrī* (?)	*muir fāith*	*anstái*	*ensti kuri* *ensti kuri* (?)	*dėktë dektė*, *naktyjė*	*nošti*
turrī quī, *ove*	*fāith*	[*anstái*], *gasta*	*ensti kuri* (?), *gastiu*	*akì*, *nakti-mì*	*noštĭją*, *pątĭ-mĭ* (dat. *nošti*)
	fā'ith			*naktì*	*nošti* *oči* (fem.)
	dat. *fāithib* gen. *fātho -a*			dat. *naktì-m* instr. *nakti-mĩ*	dat. instr. *noštĭ-ma*, neutr. *oči-ma* gen. *noštĭju* loc. *noštĭju*
turrēs [*turrīs*]	*fāithi*, *trī* 'tres'	*ansteis*	*ensti*, *dri* 'tres'	*nãktys*	*pątĭj-e* [*nošti*]
turrīs [*turrēs*] *trī-gintā*, *tria*	*fāithi* *trī*, *mure*	*ansti-ns* *þrija*	[*ensti*] *driu*	*naktìs* *trý-lika*	*nošti* *tri*
turrium, *apum*	*fāthe n-*, *trī n-*	*anstē*, *þriję* 'trium'	*ensteo -io*, *ensto*	*nakcziũ*, *krūtũ*	*noštĭjĭ*
[*turri-bus*]	[*fāithib*]	[*ansti-m*]	[*ensti-m*]	*nakty-su -sè*, *tri-su -sè*	*noštĭ-chŭ*
turri-bus	[*fāithib*]	*ansti-m* (?)	*ensti-m* (?)	*naktì-ms*	*noštĭ-mŭ*
[*turri-bus*]	*fāithi-b tri-b*	*ansti-m*	*ensti-m*	*nakti-mìs -mì*	*noštĭ-mi*

5. *u*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Armenian.	Greek.
Sing. nom.	*sūnu-s 'son':	sūnú-ṣ	bāzu-š 'arm'	zard 'ornament'	πῆχυ-ς 'lower arm' ἡδύ-ς 'suavis'
voc.	*sūnoṷ -eṷ: *sūnu:	sū́nō	bāzu	zard [nom.?]	ἵππευ πῆχυ
acc.	*sūnu-m:	sūnú-m	bāzu-m	[z zard]	πῆχυ-ν ἡδύ-ν, εὐρέα
	n. *medhu 'sweetness'	mádhu	maδu		μέθυ
gen.	*sūnoṷ-s -eṷ-s:	sūnṓ-ṣ	bāzao-š -ēu-š		πήχεος -εως, ἡδέος
	*sūn(u)ṷ-es -os:	paśv-ás mádh-uv-as	xraϑw-ō	zardu (?)	δουρός γένυ-ος
abl.	*sūnoṷ-s -eṷ-s:	sūnṓ-ṣ	bāzuoϑ bāzv-aϑ	i zardu, i zardē, i zarduē	πήχεος -εως, ἡδέος
	*sūn(u)ṷ-es -os:	paśv-ás mádh-uv-as	xraϑw-aϑ		δουρός γένυ-ος
dat.	*sūneṷ-ai̯, -(u)ṷ-ai̯:	sūnáv-ē, śíśv-ē	bāzav-ē̆, bāzv-ē̆	zardu	[πήχεϊ πήχει]
loc.	*sūnēṷ, -eṷ (?):	sūnāú	bāzāu, per^e^tō gātav-a (?)		ἵππῃϝ-ι (?)
	*sūneṷ-i:	sūnáv-i			πήχεϊ πήχει, δου
instr.	*sūnū:	sūnv-á Ved., sūnúnā	bāzu, bāzv-a	zardu	[πήχεϊ πήχει]
Dual. nom.-acc.	*sūnū:	sūnū́	bāzu, bāzv-a		πήχεε πήχει
	n. *medhṷ-i? -ī?:	mádhv-ī, mádhunī			δοῦρε
gen. etc.	dat. abl. instr.?	dat. abl. instr. sūnú-bhyām	dat. bāzu-bya		g. etc. πηχέων
	gen. *sūn(u)ṷ-oṷ-s?:	gen. loc. sūnv-ṓṣ	gen. bāzv-å		
	loc. *sūn(u)ṷ-oṷ?:		loc. bāzv-ō		
Plur. nom.	*sūneṷ-es:	sūnáv-as, -kratv-as	bāzav-ō, yātv-ō	zardk̑	πήχεες -εις
acc.	*sūnu-ns (sūnūns?):	sūnū́r -ā́n m., dhēnū́ś f., paśv-ás	bāzūš, pasr-ō [gātavō]	z zards	υἱύ-ας, πήχεας [πήχεις]
	neut. *medhū:	mádhū, mádhūni	pouru		ἡδέα, γοῦνα
gen.	*sūn(u)ṷŏm:	sūnūnā́m, dasyúm	bāzv-ąm, bāzunąm	zarduc̣	δούρων, πήχεων ἡδέων
loc.	*sūnu-s -su -si:	sūnú-ṣu	bāzu-šu -šv-a	zarduc̣	πήχεσι, γονεῦσι
dat.-abl.	*sūnu-bh- -m-:	sūnú-bhyas	bāzu-byō	dat. zarduc̣, abl. i zarduc̣	[πήχεσι]
instr.	*sūnu-bhĭ(s) -mĭ(s):	sūnú-bhiṣ	bāzu-biš	zarduk̑	[πήχεσι]

Latin.	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
manu-s	*bith* 'world'	*sunu-s*	*situ -o* 'custom'	*sūnù-s*	*synŭ*
[*manu-s*]		*sunu*	*situ -o*	*sūnaũ*	*synu*
manu-m	*bith n-*	*sunu*	*situ -o*	*súnų*	*synŭ*
pecu	*mid* (*n-*)	*faihu*	*fihu -o*	*gražù*	*medŭ* (masc.)
manū-s, *quaestī*	*betho -a*	*sunáu-s*	*fridō -o*	*sūnaũ-s*	*synu*
senātu-os -is		*mans*	*man*		
manū(*d*)				*sūnaũ-s*	*synu*
manu-ī	[*biuth*]	[*sunáu*]	[*sitiu*]	*súnui*	*synov-i*
manū	*biuth*	*sunáu*	*sitiu*	*sūnŭjè*	*synu*
		mann	*situ*(?), *man*		
manū	*biuth*	[*sunáu*]	*sitiu*	*sūnu-mì*	*synomĭ*
	bith			*súnu*	*syny*
	dat. *bethaib*			dat. *sūnù-m* instr. *sūnu-mì*	dat. instr. *synŭma*
	gen. *betha*				gen. *synov-u*
					loc. *synov-u*
manūs(?)	*mogai*	*sunjus*	*siti*	*súnūs*	*synov-e*
manūs	*bithu*	*sunu-ns*	[*siti*]	*súnus*	*syny*
senua					
manuum	*bithe n-*	*sunivē*, *mann-ē*	*siteo*, *manno*	*sūnū*	*synov-ŭ*
manu-bus manibus]	[*bethaib*]	[*sunu-m*]	[*sitim*]	*sūnů-su -sè*	*synŭ-chŭ*
manu-bus manibus	[*bethaib*]	*sunu-m?*	*sitim*(?)	*sūnù-ms*	*synomŭ*
manu-bus manibus]	*bethaib* (?)	*sunu-m*	*sitim*	*sūnu-mìs -mì*	*synŭ-mi*

6. *n*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Armenian.	Greek.
Sing. nom.	*k̑(u)u̯ō(n) 'dog'; -ē(n):	śvā́	spā	akn 'eye', anjn 'soul'	κύων, ποιμήν 'herdsman'
voc.	*k̑(u)u̯o(n); -en(?):	śvā́n	þri-zafem	akn, anjn [nom?]	κύον [ποιμήν]
acc.	*k̑(u)u̯on-m̥; -en-m̥: n. *dhēmn̥ 'ordinance':	śvā́n-am dhā́ma	spān-em dāma	[z akn]	κύν-α, τέκτον-α, ποιμέν-α θέμα
gen.	*k̑un-es -os: *-en-s:	śún-as ved. áhan (?)	sūn-o xwēṇg	akan, anjin, aśn 'of a man'	κυν-ός
abl.	*k̑un-es -os:	śún-as	sūnaþ	y akanē, y anjnē	κυν-ός
dat.	*k̑un-ai̯, *u̯idmen-ai̯ 'for knowing':	śún-ē, vidmán-ē	sūn-ę	akan, anjin	ἴδμεν-αι [κυνί, ποιμέν-ι]
loc.	*u̯idmen *u̯idmēn: *u̯idmen-i, *k̑un-i:	mūrdhán mūrdhán-i, mūrdhn-í	cašmąn caśmainī, asn-i		δόμεν δόμην πομέν-ι, κυνί
instr.	*k̑un-a (-e?): *-n̥-bhi (-n̥-mi):	śún-ā	sūn-a nāmēnī (?)	akam-b	[κυν-ί, ποιμέν-ι]
Dual. nom.-acc.	*k̑(u)u̯on-e; -en-e: n. *dhēmn-i? -ī?:	śvā́n-āu -ā dhā́mn-ī -man-ī	spān-a [dāma]		κύν-ε, τέκτον-ε, ποιμέν-ε
gen. etc.	dat. abl. instr.? gen. *k̑un-ou̯-s?: loc. *k̑un-ou̯?:	dat. abl. instr. śvábhyām gen. loc. śún-ōś	g. sūnā̊		g. etc. κυν-οῖν, ποιμέν-οιν
Plur. nom.	*k̑(u)u̯on-es; -en-es:	śvā́n-as	spān-ō	akank, akunk, anjink	κύν-ες, τέκτον-ες, ποιμέν-ες
acc.	*k̑un-n̥s? *k̑(u)u̯on-n̥s?; -en-n̥s?: n. *dhēmōn -ōn-ə:	śún-as, ukšáṇ-as dhā́mān-i, dhā́mā	spān-ō, urun-ō dāmaṇ nāmēn-ī, daęman-a	z akans z akuns, z anjins	κύν-ας, τέκτον-ας, ποιμέν-ας πῖον-α, ἄρρεν-α
gen.	*k̑un-ōm:	śún-ām	sūn-ąm	akanç	κυν-ῶν, ποιμέν-ων
loc.	*k̑(u)u̯n̥-s-su -si:	śvá-su	dāmo-hu -hv-a	akanç	κυσί, ποιμέσι, φρασί θέμα-σι
dat.-abl.	*k̑(u)u̯n̥-bh- -m-:	śvá-bhyas	dāma-byō, dāmē-byō	dat. akanç abl. y akanç	[κυσί etc.]
instr.	*k̑(u)u̯n̥-bhĭ(s) -mĭ(s):	śvá-bhiś	dāma-bīš dāmē-bīš	akam-bk	[κυσί etc.], κοτυλη δον-ό-φι

Latin.	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
homō -o, lien	*cū, āru* 'kidney'	*guma* 'man', *tuggō* 'tongue'	*gomo* 'man', *zunga* 'tongue'	*szů szun* 'dog', *akmů̃* 'stone'	*kamy* 'stone'
[*homō -o*]	[*cū*]	[*guma*]	[*gomo*]	*szun-ẽ* [*szů, akmů*]	[*kamy*]
homin-em	*coin n-, ārain n-*	*guman*	*gomon -un*	*szùn-ę ãkmen-ę*	*kamen-ĭ, dĭn-ĭ* 'day'
nōmen	*ainm n-*	*haírtō* 'heart'	*herza* 'heart'		*imę* 'name'
homin-is, carn-is	*con, āran*	*gumin-s*	*gomen -in*	*szuñ-s, akmeñ-s*	*kamen-e, dĭn-e*
	anme				
cōnventiōn-īd, [*homin-e*]				*szuñ-s, akmeñ-s*	*kamen-e, dĭn-e*
homin-ī, carn-ī, damin-ī	*coin, ārain* [*anmimm*]	[*gumin*]	[*gomen -in*]	*szùniui, ãkmeniui*	*kamen-i, dĭn-i*
	toimte			*szun-yjè, akmen-yjè*	*kamen-e, dĭn-e*
homin-e, carn-e	*coin, ārain* [*anmimm*]	*gumin*	*gomen -in*		
homine, carn-e	(*coin ārain*?) *anmimm*	*gumin*	*gumin in*	*szun-i-mì, akmen-i-mì*	*kamen-ĭ-mĭ, dĭn-ĭ-mĭ*
	coin, ārain			*szuniù, ãkmeniu*	*kamen-i, dĭn-i*
	[*ainm*]				*imen-ě imen-i*
	dat. *conaib fiadnaib* gen. *con, āran*			dat. *szun-ì-m, akmen-ì-m*, instr. *-i-mĩ*	d.i. *kamen-ĭ-ma, dĭn-ĭ-ma* g. *kamen-u, dĭn-u* l. *kamen-u, dĭn-u*
homin-ēs, carn-ēs	*coin, ārain*	*guman-s*	*gomon -un*	*szùns szùn-ys, ãkmen-s*	*jelen-e, dĭn-e, kamen-ĭje*
homin-ēs, carn-ēs	*con-a, ārn-a*	[*gumans*], *aúhsn-uns*	[*gomon -un*]	*szun-ìs, ãkmen-is*	*kamen-i, dĭn-i*
nōmina	*anmann*	*haírtōn-a, namn-a*	*herzon*		*imen-a*
homin-um	*con n-, āran n-*	*guman-ē, aúhsn-ē*	*gomōn-o*	*szun-ũ-iũ, akmen-ũ -iũ*	*kamen-ŭ, dĭn-ŭ dĭn-ĭjĭ*
[*homin-i-bus*]	[*conaib, fiadnaib*]	[*gumam*]	[*gomōm*]	*szun-ysu, akmen-ysu -ysè*	*kamen-ĭ-chŭ, dĭn-ĭ-chŭ*
homin-i-bus	[*conaib, fiadnaib*]	*gumam* (?)	*gomōm* (?)	*szun-ì-ms, akmen-ì-ms*	*kamen-ĭ-mŭ, dĭn-ĭ-mŭ*
[*homin-i-bus*]	*conaib, fiadnaib*	*gumam, aúhsnam*	*gomōm*	*szun-i-mìs, akmen-i-mìs -mì*	*kamen-ĭ-mi, dĭn-ĭ-mi*, n. *imen-y*

7. *r*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Armenian.	Greek.
Sing. nom.	**mātḗ(r)* 'mother' **dṓtō(r)* 'giver'	*mātā́, dā́tā*	*māta, dāta*	*mair*	μήτηρ, δώτωρ
voc.	**mā́ter*, **dṓtor*:	*mā́tar, dā́tar*	*mātar*^{e}, *dātar*^{e}	*mair* [nom.?]	μῆτερ, δῶτορ
acc.	**mātér-m̥*, **dṓtor-m̥*:	*mātár-am, dā́tār-am*	*mātar-em, dātār-em*	[*z mair*]	μητέρ-α, δώτορ-α
gen.	**mātr-es -os*, **dōtr-es -os*: **mātr̥-s*, **dōtr̥-s*:	*nár-as* *mātúr, dā́tur*	*māþr-ō, dāþr-ō* *ner*^{e}*-š, sāstar-š*	*maur dster, kʼer*	μητρ-ός μητέρ-ος δώτορ-ος
abl.	**mātr-es -os*, **dōtr-es -os*:		*māþraþ, dāþraþ*	*i maurē i dsterē*	μητρ-ός μητέρ-ος δώτορ-ος
dat.	**mātr-ai̯*, **dōtr-ai̯*:	*mātr-ḗ, dā́tr-ē*	*māþr-ę̄, dāþr-ę̄*	*maur dster*	[μητέρι μητρί, δώτορι]
loc.	**māter-i -tr-i*, **dōter-i -tr-i*:	*mātár-i, dā́tar-i*	*mātairi, dātairi*		μητέρ-ι μητρ-ί δώτορ-ι
instr.	**mātr-a*, **dōtr-a* (-*e*?):	*mātr-ā́, dā́tr-ā*	*māþr-a, dāþr-a*	*mar-b dster-b*	[μητέρι μητρί, δώτορι]
Dual. nom.-acc.	**mātér-e*, **dṓtor-e*:	*mātár-āu -ā, dā́tār-āu -ā*	*mātar-a māþr-a, dātār-a*		μητέρ-ε, δώτορ-ε
gen. etc.	dat. abl. instr.? gen. **mātr-ou̯-s*? **dōtr-ou̯s*?: loc. **mātr-ou̯*? **dōtr-ou̯*?:	d. a. i. *mātŕ̥-bhyām, dā́tr̥-bhyām* gen. loc. *mātr-ṓṣ, dā́tr-ōṣ*	dat. *māter*^{e}*-bya, dāter*^{e}*-bya* gen. *nar-ā̊*		gen. etc. μητέρ-οιν δωτόρ-οιν
Plur. nom.	**mātér-es* **dṓtor-es*:	*mātár-as, dā́tār-as*	*mātar-ō, dātār-ō*	*mar-kʼ dster-kʼ*	μητέρ-ες, δώτορ-ες
acc.	**mātr-n̥s*, *dōtr-n̥s* or **māter-n̥s* **dōtor-n̥s*: n. **qetu̯ōr(ə)* '4':	*pitŕ̥n nŕ̥r* m., *mātŕ̥ṣ* f., *dā́tr̥n* *catvā́r-i, dātŕ̥ṇi*	*mātar-ō, f*^{e}*-đr-ō, māter-ąs, dātār-ō*	*z mars z dsters*	μητέρ-ας θύγατρ-ας, δώτορ-ας τέτορ-α τέτταρ-α
gen.	**mātr-ŏm*, **dōtr-ŏm*:	*mātr̥ṇā́m, svásr-ām, dā́tr̥ṇām*	*māþr-ąm, dāþr-ąm*	*març dsterç (dsteraç)*	πατρ-ῶν μητέρ-ων, δωτόρ-ων
loc.	**mātr̥-s -su -si*, **dōtr̥-s -su -si*:	*mātŕ-ṣu, dā́tr̥-ṣu*		*març dsterç (dsteraç)*	μητρά-σι, δώτορ-σι
dat.-abl.	**mātr̥-bh- -m-*, **dōtr̥-bh- -m-*:	*mātŕ̥-bhyas, dā́tr̥-bhyas*	*māter*^{e}*-byō, dāter*^{e}*-byō*	dat. *març* abl. *i març* etc.	[μητράσι, δώτορσι]
instr.	**mātr̥-bhĭ(s) -mĭ(s)*, **dōtr̥-bhĭ(s-) -mĭ(s)*:	*mātŕ̥-bhiṣ, dā́tr̥-bhiṣ*	*māter*^{e}*-biš, dāter*^{e}*-biš*	*mar-bkʼ dster-bkʼ*	[μητράσι, δώτορσι]

Latin	Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
māter, dator	*māthir, siur* 'soror'	*brōþar* 'brother'	*muoter*	*motẽ móte* 'wife', *sesū̃* 'soror'	*mati*
māter [nom.?], [*dator*]	*māthir* [nom.?], [*siur*]	*brōþar* [nom.?]	*muoter* [nom.?]	[*motẽ móte, sesū̃*]	[*mati*]
mātr-em, datōr--em	*māthir n-*	*brōþar*	*muoter*	*móter-ę*	*mater-ĭ* [*mater-e*
mātr-is -us, datōr-is	*māthar* (?)	*brōþr-s*	*muoter* ags. *mōdor*	*moteẽ-s*	*mater-e*
[*mātr-e*]				*moteẽ-s*	*mater-e*
mātr-i, datōr--ī	*māthir*	[*brōþr*]	[*muoter*]	*móter-iai*	*mater-i*
mātr-e, datōr--e	*māthir*	*brōþr*	*muoter*	*moter-yjè*	*mater-i*
mātr-e, dator--e	(*māthir* ?)	*brōþr*	*muoter*	*moter-i-mì*	*mater-ĭją*
	māthir, siair			*móter-i*	*mater-i*
	dat. *māithrib* gen. *māthar*			dat. *moter-ì-m* instr. *moter-i-mĩ*	dat. instr. *mater--ĭ-ma* gen. *mater-u* loc. *mater-u*
mātr-ēs, datōr--ēs	*māthir*	*brōþrjus*	*muoter*	*móter-s*	[*materi*]
mātr-ēs, datōr-ēs	*māthrea*	*brōþr-uns*	[*muoter*]	*móter-is móteres*	*mater-i*
quattuor	*cethir*	*fidvōr*			*cetyr-i*
mātr-um, datōr-um	*māthar māthre n-*	*brōþr-ē*	*muoter-o*	*moter-ū̃ -iū̃*	*mater-ŭ*
mātribus, datōribus]	[*māithrib*]	[*brōþrum*]	[*muoterum*]	*moter-ysu -ysè*	*mater-ĭ-chŭ*
nātr-i-bus, datōr-i-bus	[*māithrib*], cp. Gall. *mātre-bo*	*brōþru-m* (?)	*muoter-um* (?)	*moter-ì-ms*	*mater-ĭ-mŭ*
mātribus, datōribus]	*māithri-b māthrai-b*(?)	*brōþru-m*	*muoter-um*	*moter-i-mìs -mì*	*mater-ĭ-mi*

8. *nt*--Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Greek.	Latin.
Sing. nom.	**bhr̥ĝhont-s* 'celsus'	*bṛhán*	*ber^{e}zaṇs*	φέρων 'bearing', ἄεις 'blowing'	*ferēns*
voc.	**bhr̥ĝhont:*	*bṛ́han*		γέρον	[*ferēns*]
acc.	**bhr̥ĝhont-m̥:*	*bṛhánt-am*	*ber^{e}zant-em*	φέροντ-α	*ferent-em*
	neut. **dé-d-n̥t* 'giving':	*dádat, bṛhát*	*ber^{e}zaƀ*	φέρον, πέψαν	*ferēns*
gen.	**bhr̥ĝhn̥t-es -os:*	*bṛhat-ás*	*ber^{e}zat-ō -ant-ō*	φέροντ-ος	*ferent-is*
abl.	**bhr̥ĝhn̥t-es -os:*	*bṛhat-ás*	*ber^{e}zataƀ -antaƀ*	φέροντ-ος	*ferentī(d)* [*ferent-e*]
dat.	**bhr̥ĝhn̥t-ai̯:*	*bṛhat-é*	*ber^{e}zaitē -antē*	[φέροντ-ι]	*ferentī*
loc.	**bhr̥ĝhent-i -n̥t-i:*	*bṛhat-í*	*astvainti -vaiti*	φέρον-τι	*ferent-e*
instr.	**bhr̥ĝhn̥t-a(-e?):*	*bṛhat-ā́*	*ber^{e}zat-a -ant-a*	[φέροντ-ι]	*ferent-e*
Dual. nom.-acc.	**bhr̥ĝhont-e:*	*bṛhánt-āu -ā*	*ber^{e}zant-a*	φέροντ-ε	
	neut. **bhr̥ĝhn̥t-i?. -i?:*	*bṛhat-ī*	cp. *vīsaiti*	cp. *f(κατ-ι*	
gen. etc.	dat. abl. instr.?:	dat. abl. instr. *bṛhád-bhyām*	dat. *ber^{e}zad-bya -aƀbya, ber^{e}zanbya*	gen. etc. φερόντοιν	
	g. **bhr̥ĝhn̥t-oṷs?:* l. **bhr̥ĝhn̥t-oṷ?:*	gen. loc. *bṛhat-ṓs*	gen. *ber^{e}zant-å*		
Plur. nom.	**bhr̥ĝhont-es:*	*bṛhánt-as*	*ber^{e}zant-ō*	φέροντ-ες	*ferent-ēs*
acc.	**bhr̥ĝhn̥t-n̥s* or **bhr̥ĝhont-n̥s:*	*bṛhat-ás*	*ber^{e}zat-ō -ant-ō*	φέροντ-ας	*ferent-ēs*
	neut. *-nt -ntə:*	*bṛhánt-i, sā́nt-i*	*mīždavaṇ*	φέροντ-α	*silent-a feren-ia*
gen.	**bhr̥ĝhn̥t-ōm:*	*bṛhat-ā́m*	*ber^{e}zat-ąm -ant-ąm*	φερόντ-ων	*ferent-ium -ium*
loc.	**bhr̥ĝhn̥t-s -su -si:*	*bṛhát-su*	*ber^{e}zasu*	φέρουσι, πρᾶσσόντ-ασσι	[*ferentibus*]
dat.-abl.	**bhr̥ĝhn̥d-bh- -n̥t-m-:*	*bṛhád-bhyas*	*ber^{e}zad-byō -aƀ-byō, ber^{e}žanbyō*	[φέρουσι]	*ferent-i-bus*
instr.	**bhr̥ĝhn̥d-bhĭ(s) -n̥t-mĭ(s):*	*bṛhád-bhiš*	*ber^{e}zad-biš -aƀ-biš, ber^{e}zanbiš*	[φέρουσι]	[*ferentibus*]

Irish.	Gothic.	O.H.G.	Lithuanian.	O.C.Sl.
care cara 'friend'	*frijōnd-s* 'friend'	*friunt* 'friend', *zan* 'tooth'	*vežą̃s* 'vehens', *dant-ì-s* 'tooth'	*vezy* 'vehens'; neut. *vezy*
[*care cara*]	*frijōnd*	*friunt*		
carit n-	*frijōnd, tunþ-u* 'dentem'	*friunt*	*vẽžantį dañt-į* *vežą̃, dů̃sę*	*veząštĭ* *veząšte*
carat	*frijōnd-i-s*	*friunt-e-s*	*vẽžanczio*	*veząšta*
			vẽžanczio	*veząšta*
carit	[*frijōnd*]	[*friunt*]	*vẽžancziām*	*veząštu*
carit	*frijōnd*	*friunt*	*vẽžancziame*	*veząšti*
(*carit?*)	*frijōnd*	*friunt*	*vẽžancziu*	*veząštemĭ*
carit			*vẽžancziu-du*	*veząšta* *veząšti*
dat. *cairtib* gen. *carat*			dat. *vežantĕm-dvëm* instr. *vežantẽm-dvëm*	dat. instr. *veząštema* gen. *veząštu* loc. *veząštu*
carit	*frijōnds*	*friunt*	*vežą̃, vẽžant-ys*	*veząšte*
cairtea	[*frijōnds*] *tunþ-uns*	[*friunt*]	*vẽžanczius, dant-ìs*	*veząštę* *veząšta*
carat n-	*frijōndē*	*friunt-o*	*vežancziũ, dant-ũ*	*veząštĭ*
[*cairtib*]	[*frijōndam*]	[*friuntum*]	*vẽžancziů-su -se, dant-y-su -sè*	*veząštichŭ*
[*cairtib*]	*frijōnd-a-m* (?)	*friunt-um* (?)	*vẽžantëms, dant-ì-ms*	*veząštemŭ*
cairti-b	*frijōnd-a-m, tunþ-um*, cp. *tigum*	*friunt-um*	*vẽžancziaĩs, danti-mìs -mì*	*veząšti*, neut. *telęt-y*

9. *es*-Stems.

	Pr. Idg.	Sanskrit.	Avestic.	Greek.
Sing. nom.	neut. **menos* 'mind': masc. **dus-menēs* 'ill disposed' neut. **dus-menes:*	*mánas* *durmánās* *durmanas*	*manō manē* *dušmanā̊* *dušmanō*	*μένος* *δυσμενής* *δυσμενές*
voc.	masc. **dus-menes:*	*dúrmanas*	*dušmanō*	*δυσμενές*
acc.	masc. **dus-menes-m̥:*	*durmanas-am*	*dušmanəh-em*	*δυσμενέα -ῆ*
gen.	**menes-es -os*, **mēns-es -os* 'mensis':	*mánas-as*	*manəh-ō*	*μένεος -ους, μην-ός*
abl.	**menes-es -os*, **mēns-es -os:*	*mánas-as*	*manəhaϕ*	*μένεος -ους, μην-ός*
dat.	**menes-ai̯*, **mēns-ai̯:*	*mánas-ē*	*manəh-ę̄*	[*μένεϊ -ει, μηνί*]
loc.	**menes*, **mēnes:* **menes-i*, **mēnes-i* **mēns-i:*	*sa-dívas* *mánas-i*	*manah-i*	*αἰές* *μένεϊ -ει, μην-ί*
instr.	**menes-a* (*-e?*), *mēns-a* (*-e?*):	*mánas-ā, bhiš-ā́*	*manəh-a*	[*μένεϊ -ει, μηνί*]
Dual. nom.-acc.	neut. **menes-i?* *-ī?*: masc. **dus-menes-e:*	*m̥ánas-ī* *durmanas-āu -ā*	*dušmanəh-a*	*μένει* **δυσμενεῖ*
gen. etc.	dat. abl. instr?: gen. **menes-ou̯-s*, **mēns-ou̯-s?*: l. **menes-ou̯*, **mēns-ou̯?*:	dat. abl. instr. *mánō-bhyām* gen. loc. *mánas-ōš*	dat. **manē-bya*	gen. etc. *μενέοιν -οῖν, μην-οῖν*
Plur. nom.	neut. **menōs -ōs-ə:* masc. **dus-menes-es:* neut. **dus-menes-ə:*	*mánā̆s-i* *durmánas-as* *durmanā̆s-i*	*manā̊ var^ecāh-ī manəh-a* *dušmanəh-ō*	*μένε-α μένη* *δυσμενέ-ες -εῖς* *δυσμενέ-α -ῆ*
acc.	masc. **dus-menes-n̥s:*	*durmanas-as*	*dušmanəh-ō*	*δυσμενέ-ας*, [*δυσμενεῖς*]
gen.	**menes-ŏm*, **mēns-ŏm:*	*mánas-ām*	*manəh-ąm*	*μενέ-ων -ῶν, μην-ῶν*
loc.	**menesu -si* (**menes-su -si*):	*mánasu mánas-su -aḥ-su*	*manahu -ahv-a*	*μένεσ-σι -εσι, μησί*
dat.-abl.	**menez-bh- -es-m:*	*mánō-bhyas*, cp. *uṣád-bhyas*	*manē-byō*	[*μένεσσι -εσι, μησί*]
instr.	**menez-bhĭ(s) -es-mĭ(s):*	*mánō-bhiš*, cp. *uṣád-bhiš*	*manē-biš*	*ὄρεσ-φι*, [*μένεσσι -εσι, μησί*]

Latin.	Irish.	O.H.G.	Lithuanian.	O.C.Sl.
genus *dēgener pūbēs* *dēgener*	*tech* (*n*-) 'house'	*kalb* 'calf'	*ãkas* 'ice-hole' (masc.)	*slovo* 'word'
[*dēgener pūbēs*]				
dēgener-em				
gener-is Vener- *-us, mēns-is*	*tige, mīs*	*kalbes*, cp. *Kelbiris-bach*	*debes-ẽs* 'of a cloud'	*sloves-e*
airīd, [*aer-e, mēns-e*]			*debes-ẽs*	*sloves-e*
gener-ī, mēns-ī	[*taig*], *mīs*	*kalbir-e kalbe*	*dẽbes-iai*	*sloves-i*
penes *gener-e, mēns-e*	*taig* *mīs*	*kalbir-e kalbe*	*debes-yjè*	*sloves-e*
gener-e, mēns-e	[*taig*], (*mīs*?)		*debes-i-mì*	*sloves-ĭ-mĭ*
	[*tech*]			*sloves-i, -ĕ*
	dat. *tigib, mīsaib* dat. *tige, mīs*		dat. *debes-ì-m* instr. *debes-i-ìu*	dat. instr. *sloves-* *-ĭ-ma* gen. *sloves-u* loc. *sloves-u*
gener-a *dēgener-ēs*	*tige*	*kalbir*		*sloves-a*
dēgener-ēs				
gener-um, mēns- *-um*	*tige n-, mīs n-*	*kalbir-o*	*debes-ũ -iũ*	*sloves-ŭ*
generibus]	[*tigib*]	[*kalbirum*]	*debes-ysu -ysè*	*sloves-ĭ-chu*
gener-i-bus	[*tigib*]	*kalbir-um* (?)	*debes-ì-ms*	*sloves-ĭ-mŭ*
generibus]	*tigi-b*	*kalbir-um*	*debes-i-mìs -mì*	*solves-y*

10. *i̯es-* and *u̯es-*Stems.

	Pr. Idg.	Sanskrit.	Greek.	Latin.	O.C.Sl.
Sing. nom.	*ōk̑(i)i̯ōs 'ocior':	áśīyāṣ -ān, Avest. ā-syā̊	ἡδίων 'suavior'	ōcior	slaždĭjĭ 'süsse
voc.	*ōk̑(i)i̯os:	áśīyas, -yan	ἥδιον	[ōcior]	
acc.	*ōk̑(i)i̯os-m̥:	áśīyāṣ-am, Avest āsyā̊ṇh-em	ἡδίω, -ίον-α	ōciōr-em	slaždĭjĭ
	neut. *ōk̑(i)i̯os:	áśīyas	ἥδιον	ōcius	slažde
gen.	*ōk̑is-es -os:	áśīyas-as	ἡδίον-ος	ōciōr-is	slaždĭša
abl.	*ōk̑is-es -os:	áśīyas-as, Avest. *ā-syaṇhaƀ	ἡδίον-ος	ōciōr-ī, [ōciōr-e]	slaždĭša
dat.	*ōk̑is-ai̯:	áśīyas-ē	[ἡδίον-ι]	ōciōr-i	slaždĭšu
loc.	*ōk̑(i)i̯es-i -is-i:	áśīyas-i	ἡδίον-ι	ōciōr-e	slaždĭši
instr.	*ōk̑is-a (-e?):	áśīyas-ā	[ἡδίον-ι]	ōciōr-e	slaždĭšemĭ
Dual. nom.-acc.	*ōk̑(i)i̯os-e:	áśīyāṣ-āu -ā	ἡδίον-ε		slaždĭša
	neut. *ōk̑is-i? -ī?:	áśīyas-ī			slažd ĭ š i (?)
gen. etc.	dat. abl. instr.?	dat. abl. instr. áśīyō-bhyām	gen. etc. ἡδίόν-οιν		dat. instr. slaždĭšema
	gen. *ōk̑is-ou̯-s?:	gen. loc. áśīyas-ōṣ			gen. slaždĭšu
	loc. *ōk̑is-ou̯?:				loc. slaždĭšu
Plur. nom.	*ōk̑(i)i̯os-es:	áśīyāṣ-as, Avest. *ā s yā̊ṇh-ō	ἡδίους, ἡδίον-ες	ōciōr-ēs	slaždĭše
acc.	*ōk̑is-n̥s or ōk̑(i)-i̯os-n̥s:	áśīyas-as	[ἡδίους], πλέας, ἡδίον-ας	ōciōr-ēs	slaždĭšę
	neut. *ōk̑(i)i̯ōs-i̯ōs-e:	áśīyāṣ-i	ἡδίω(?), ἡδίον-α	ōciōr-a	slaždĭšu
gen.	*ōk̑is-ŏm:	áśīyas-ām	ἡδιόν-ων	ōciōr-um	slaždĭší
loc.	*ōk̑isu -si (*ōk̑is-su -si):	áśīyas-su -aḥ-su	ἡδίοσι	[ōciōribus]	slaždĭšichŭ
dat.-abl.	*ōk̑iz-bh- -is-m-:	áśīyō-bhyas	[ἡδίοσι]	ōcior-i-bus	slaždĭšemŭ
instr.	*ōk̑iz-bhĭ(s) -is-mĭ(s):	áśīyō-bhiṣ	[ἡδίοσι]	[ociōribus]	slaždĭši

Pr. Idg.	Sanskrit.	Avestic.	Greek.	Lithuanian.
*u̯éi̯du̯ōs (*u̯idu̯és) 'knowing'	*vidvā́s -ā́n*	*vīđvå*	εἰδώς	*mìrę̨s* 'dead' O.C.Sl. m. n. *mĭr-ŭ*
*u̯éi̯du̯os:	*vídvas, -van*			
*u̯éi̯du̯os-m̥:	*vidvā́s-am*	*vīđvåŋh-em*	εἰδότ-α	*mìrus-į*
*u̯éi̯du̯os:	*vidvát*		εἰδός	*mìrę*, aksl. *mĭrŭše*
*u̯ei̯dus-es -os:	*vidúṣ-as*	*vīđuš-ō*	εἰδότ-ος	*mìrus-io*
*u̯ei̯dus-es -os:	*vidúṣ-as*	*vīđušaþ*	εἰδότ-ος	*mìrus-io*
*u̯ei̯dus-ai̯:	*vidúṣ-ē*	*vīđuš-ę̄*	[εἰδότι]	*mìrus-iām*
*u̯ei̯du̯es-i -us-i:	*vidúṣ-i*		εἰδότ-ι	*mìrus-iame*
*u̯ei̯dus-a (-e?):	*vidúṣ-ā*	*vīđuš-a*	[εἰδότι]	*mìrus-iu*
*u̯éi̯du̯os-e:	*vidvā́s-āu -ā*		εἰδότ-ε	*mìrus-iu*
neut. *u̯ei̯dus-i? -ī?:	*v|idúṣ-ī*			O.C.Sl. *mĭrŭši* (?)
dat. abl. instr.?	dat. abl. instr. *vidvád-bhyām*	dat. **vīđūž-bya*	gen. etc. εἰδότ-οιν	dat. instr. *mìrusëm-dvëm*
gen. *u̯ei̯dus-ou̯-s?:	gen. loc. *vidúṣ-ōṣ*			O.C.Sl. gen. *mĭrŭšu*
loc. *u̯ei̯dus-ou̯?:				O.C.Sl. loc. *mĭrŭšu*
*u̯éi̯du̯os-es:	*vidvā́s-as*	*vīđvåŋh-ō*	εἰδότ-ες	*mìrę mìrus-ys*, aksl. *mĭrŭše*
*u̯ei̯dus-n̥s or *u̯éi̯du̯os-n̥s:	*vidúṣ-as*	*vīđuš-ō*	εἰδότ-ας	*mìrus-ius*
n. *u̯ei̯dvōs -u̯ōs-ə:	*vidvā́s-i*		εἰδότ-α	O.C.Sl. *mĭrŭša*
*u̯ei̯dus-ŏm:	*vidúṣ-ām*	*vīđuš-ąm*	εἰδότ-ων	*mìrus-iū*
*u̯ei̯dusu -si (*u̯ei̯dus-su -si):	*vidvátsu*		εἰδόσι	*mìrus-iůsu -se*
*u̯ei̯duz-bh- -us-m-:	*vidvádbhyas*	**vīđūž-byō*	[εἰδόσι]	*mìrus-ëms*
*u̯ei̯duz-bhĭ(s) -us-mĭ(s):	*vidvádbhiṣ*	*vīđūž-bīš*	[εἰδόσι]	*mìrus-iais*

11. *ū- uu̯-, ī- ii̯-, l̥̄- l̥l-*Stems.

	Pr. Idg.	Sanskrit.			Greek.
Sing. nom.	**bhrū-s* 'brow':	*bhrū́-ṣ*	*dhī́-ṣ* 'thought'	*pū́r* 'fortress'	ὀφρῦ-ς
voc.	**bhrū?*:	[*bhrū́ṣ*], *švášru*	[*dhī́ṣ*], *nádi*	[*pū́r*]	ἰχθῦ 'fish'
acc.	**bhrū-m*:	*tanū́-m*	Avest. *ber^ezai-đīm*	cp. *jā́-m*	ὀφρῦ-ν
	**bhruu̯-m̥*:	*bhrúv-am*	*dhíy-am*	*púr-am*	ὀφρύα (?)
gen.	**bhruu̯-es -os*:	*bhruv-ás*	*dhiy-ás*	*pur-ás*	ὀφρύ-ος
abl.	**bhruu̯-es -os*	*bhruv-ás*	*dhiy-ás*	*pur-ás*	ὀφρύ-ος
dat.	**bhruu̯-ai̯*:	*bhruv-ḗ*	*dhiy-ḗ*	*pur-ḗ*	[ὀφρύι]
loc.	**bhruu̯-i*:	*bhruv-í*, *camū́*	*dhiy-í*, *gāurī́*	*pur-í*	ὀφρύ-ι
instr.	**bhruu̯-a (-e?)*:	*bhruv-ā́*	*dhiy-ā́*	*pur-ā́*	[ὀφρύι]
Dual. nom.-acc.	**bhruu̯-e*:	*bhrúv-āu -ā*	*dhiy-āu -ā*	*púr-āu -ā*	ὀφρύ-ε
gen. etc.	dat. abl. instr.?	dat. abl. instr. *bhrū-bhyā́m*	dat. abl. instr. *dhī-bhyā́m*	dat. abl. instr. *pūr-bhyā́m*	gen. etc. ὀφρύ-οιν
	gen. **bhruu̯-ou̯-s?*:	gen. loc. *bhruv-ṓṣ*	gen. loc. *dhiy-ṓṣ*	gen. loc. *pur-ṓṣ*	
	loc. **bhruu̯-ou̯?*:				
Plur. nom.	**bhruu̯-es*:	*bhrúv-as*	*dhíy-as*	*púr-as*	ὀφρύ-ες
acc.	**bhruu̯-n̥s*:	*bhrúv-as*	*dhíy-as*	*púr-as*	ὀφρύ-ας, ὀφρῦ
gen.	**bhruu̯-ŏm*:	*bhruv-ā́m bhrū-ṇā́m*	*dhiy-ā́m dhī-nā́m*	*pur-ā́m*	ὀφρύ-ων
loc.	**bhrū-s -su -si*:	*bhrū-ṣú*	*dhī-ṣú*	*pūr-ṣú*	ὀφρύ-σι
dat.-abl.	**bhrū-bh- -m-*:	*bhrū-bhyás*	*dhī-bhyás*	*pūr-bhyás*	[ὀφρύσι]
instr.	**bhrū-bhĭ(s) -mĭ(s)*:	*bhrū-bhíṣ*	*dhī-bhíṣ*	*pūr-bhíṣ*	[ὀφρύσι]

Greek.	Latin.		O.Icel.	Lithuanian.	O.C.Sl.
κῖ-ς 'weevil'	*sū-s*	*vī-s*	*sy-r* 'Sow'	*žuv-ì-s* 'fish'	*krŭv-ĭ* O.Pol. *kry* 'blood'
Θέτῑ	[*sūs*]	[*vīs*]		*žuv-ẽ*	*svekry* (?)
κῖ-ν	*socrum* (?)	*vi-m*	*sū*		*ljuby* (?)
	su-em			*žùv-į*	*krŭv-ĭ*
κι-ός	*su-is*	*vīs*	*sȳr*	*žuv-ẽs*	*krŭv-e*
κι-ός	[*su-e*]	*vī*		*žuv-ẽs*	*krŭv-e*
[κιί]	*su-ī*	*vī*	*sū*	*žùv-iai*	*krŭv-i*
κι-ί	*su-e*	*vī* (?)	*sū*	*žuv-yjè*	*krŭv-i svekrŭv-e*
[κιί], ἴ-φι	*su-e*	*vī*	*sū*	*žuv-i-mì*	*krŭv-ĭją*
ἰ-ε				*žuv-ì*	
gen. etc. κι-οῖν				dat. *žuv-ì-m* instr. *žuv-i-mĩ*	
ἰ-ες	*su-ēs*	*vīs vīrēs*	*sȳr*	*žùv-ys*	[*krŭv-i*]
ἰ-ας	*su-ēs*	*vīs vīrēs*	[*sȳr*]	*žuv-ìs*	*krŭv-i*
ι-ῶν	*šŭ-um, -ium*	*vīrium*	*sūa*	*žuv-ū, -iū*	*krŭv-ĭjĭ, svekrŭv-ū*
-σί	[*sūbus subus su-ibus*]	[*vīribus*]	[*sūm*]	*žuv-y-su -sè*	*krŭv-ĭ-chŭ*
[ισί]	*sū-bus su-bus su-i-bus*	*vīribus*	*sū-m?*	*žuv-ì-ms*	*krŭv-ĭ-mŭ*
[ισί]	[*sūbus subus su-ibus*]	[*vīribus*]	*sū-m*	*žuv-i-mìs -mì*	*krŭv-ĭ-mi*

12. The Stems *nāu̯- 'ship', *geu̯- *gou̯- 'head of cattle'.

	Pr. Idg.	Sanskrit.	Greek.	Latin.
Sing. nom.	*nāu̯-s 'ship':	nā́u-š	ναῦ-ς, νηῦς	nāv-i-s
acc.	*nāu̯-m̥:	nā́v-am	νῆ-α ναῦν	nāv-em, nāv-i-m
gen.	*nāu̯-es -os:	nāv-ás	νη-ός νεώς	nāv-is
abl.	*nāu̯-es -os:	nāv-ás	νη-ός νεώς	nāv-ī-(d), [nāve]
dat.	*nāu̯-ai̯:	nāv-é	[νηΐ]	nāv-ī
loc.	*nāu̯-i:	nāv-í	νη-ΐ	nāv-e
instr.	*nāu̯-a (-e?)	nāv-ā́	[νηΐ]	nāv-e
Dual. nom-acc.	*nāu̯-e:	nā́v-āu -ā	*νῆ-ε	
gen etc.	dat. abl. instr.?: gen. *nāu̯-ou̯-s?: loc. *nāu̯-ou̯?:	dat. abl. instr. nāu-bhyā́m gen. loc. nāv-ós	gen. etc. *νηοῖν	
Plur. nom.	*nāu̯-es:	nā́v-ai̯s	νῆ-ες	nāv-ēs
acc.	*nāu̯-n̥s:	nā́v-as	νῆ-ας, ναῦς	nāv-ēs
gen.	*nāu̯-ŏm:	nāv-ā́m	νη-ῶν νεῶν	nāv-ium
loc.	*nāu̯-s -su -si:	nāu-šú	ναυ-σί, νηυ-σί	[nāvibus]
dat.-abl.	*nāu̯-bh- -m-:	nāu-bhyás	[ναυσί, νηυσί]	nāv-i-bus
instr.	*nāu̯-bhĭ(s) -mĭ(s):	nāu-bhíš	ναῦ-φι [ναυσί νηυσί]	[nāvibus]

Pr. Idg.	Sanskrit.	Greek.	Latin.	Irish.	O.H.G.
*gōu̯-s 'ox. cow':	gā́ú-ṣ	βοῦ-ς, βῶς	bō-s	bō	kuo
*gōm:	gā́m, Avest. gāum	βῶν, βοῦν	bov-em, Umbr. bum	boin n-	kuo
*g(u)u̯-es *gou̯-s:	gṓṣ, gáv-as	Βόσ-πορος, βο-ός	bov-is	bou bō	kuo
*g(u)u̯-es *gou̯-s:	gṓṣ, gáv-as	βο-ός	bovī(d), [bove]		
*g(u)u̯-ai̯(*gou̯-ai̯?):	gáv-ē	[βοῖ]	bov-ī	boin	
*geu̯-i *g(u)u̯-i:	gáv-i	βο-ῖ	bov-e	boin	
*g(u)u̯-a (*gou̯-a?) (-e?):	gáv-ā	[βοῖ]	bov-e	boin (?)	
*gou̯-e:	gā́v-āu -ā	βό-ε		boin	
lat. abl. instr.?: gen. *g(u)u̯-ou̯-s? (*gou̯-ou̯-s?): loc. *g(u)u̯-ou̯? (*gou̯-ou̯?):	dat. abl. instr. gṓ-bhyām gen. loc. gáv-ōṣ	gen. etc. βο-οῖν		dat. buaib gen. bō	
gou̯-es:	gā́v-as	βό-ες	bov-ēs	bai (?)	kuo, kuo-i
g(u)u̯-u̯s or *gou̯-u̯s?:	gā́s, gāv-as (?)	βό-ας, βοῦς βῶς	bov-ēs	bū	[kuo, kuo-i]
g(u)u̯-ŏm (*gou̯-ŏm?):	gáv-ām gónām	βο-ῶν	bov-om boum	bō n-	kuo
gŭ-s -su -si (*gou̯-s -su -si?):	gṓ-ṣu	βου-σί	[būbus bōbus]	[buaib]	O.Low Frankish [cuon]
gŭ-bhĭ- -m- (*gou̯-bh- -m- ?):	gṓ-bhyas	[βουσί]	bū-bus bō-bus	[buaib]	O.Low Frankish cuon?
gŭ-bhĭ(s) -mĭ(s) (gou̯-bhĭ(s)-mĭs(?):	gṓ-bhiṣ	[βουσί]	[būbus bōbus]	buaib	O.Low Frankish cuon

In Latin, Slavonic, and Aryan, side by side with pronouns strictly so called, are found a number of derivatives from pronouns, and adjectives derived from nouns, forming their cases as pronouns do. Take as examples Lat. *ū-nu-s al-ter u-ter sōlu-s tōtu-s*, although the genitive singular of these words — the only case which concerns us in them — had the noun ending as well, as gen. *sōlī Lūciī*, dat. *nullō ūsui*, dat. *mihi solae* (for the gen. in *-ī* cp. § 419). O.C.Sl. *tvojĭ* 'thy' *ta-kŭ* 'talis' *to--likŭ* 'tantus' *mŭnogŭ* 'multus' *drugŭ* 'alius'. Skr. *ka-tará-s* 'uter' superl. *ka-tamá-s*, *ē-ka-s* 'unus' Avest. *ae-va* 'unus', Skr. *víśva-s* Avest. *vīspa-* Skr. *sárva-* 'all' *dákṣiṇa-s* 'right, of the right hand, southerly' *madhyamá-s* 'midmost' Avest. *abdō--tema-* 'deepest' (*a-bda-* properly 'footless'); but the Aryan words of this class also have the noun flexion, some of them often, others rarely, as R.-V. dat. *víśvāya* beside *víśvasmāi*, Avest. gen. *vīspanąm* beside *vīspaęšąm*.

But in Germanic, Lithuanian, and Armenian we see the inflexion of pronouns applied to any adjective at will.

In Germanic grammar this kind of adjectival flexion[1]) is called the Strong Declension, as opposed to what is called the Weak, the latter of which has arisen by the transfer of stems to the *n*-class; examples are Goth. nom. pl. *blindái* like *þái* (cp. § 314 p. 214), beside which is *blindans* like *gumans*. The former is the older, and is the rule when the adjective is used predicatively or as an attribute without an accompanying article; the latter arose when the stems were made substantives by means of the suffix *-en-*, and it is used after the article and mostly where the adjective has the value of a substantive (see II § 114 p. 353). Declined like pronouns: Goth. masc. *blindamma midjamma hráinjamma hardjamma* (nom. *blind-s midji-s hráin-s hardu-s*) following *þamma*, also *blindái* following *þái*,

1) Leo Meyer, Über die Adjectiva im Deutschen, Berl. 1863; Das Deutsche, insb. gotische Adjectivum, Germania IX 137 ff.; Zur Lehre von der deutschen Adjectivflexion, Zeitschr. deutsch. Phil. IX 1 ff. Holtzmann, Das got. Adjectivum, Germania VIII 257 ff. Sievers, Die starke Adjectivdeclination, Paul-Braune's Beitr. II 98 ff.

blindáizē following **þáizē* (*þizē* is used instead of this), *blindáim* following *þáim*, neut. *blindat-a* following *þat-a* (also, with noun-flexion, *blind*, like *hráin hardu*), fem. *blindáizōs* following **þáizōs* (*þizōs* is the form used), *blindáizō* following **þáizō* (the form used is *þizō*); O.H.G. *blintemu blinte blintero blintēm, blintaz, blintera blintero.* As regards such variations as *blindáizē* : *þizē* see §§ 420, 429. The acc. *blindan-a* (O.H.G. *blintan*) follows the noun declension in its suffix *-an*, but the particle *-a* affixed to it assimilates the ending to the pronouns, cp. *þan-a* (§ 417). In O.H.G. other forms were drawn into the circle of attraction, *blintēr* like *jenēr* (§ 414), *blintiu* like *diu.* There is some strangeness in Goth. dat. sing. fem. *blindái* like *gibái* beside *þizái*; but O.H.G. *blinteru* O.Icel. *blindre* are pronominal forms, and doubtless fairly reproduce those used in proethnic Germanic.

In Lithuanian, where the endings peculiar to pronouns are found only in the masculine (neuter), it results that adjectives differ from nouns only in this gender. Masc. sing. *gerám geramè*, pl. *gerëms*, dual *gerëm gerẽm*, like *tám tamè*, *tëms*, *tëm*(*-dvëm*) *tẽm*(*-dvëm*). The nom. pl. is *gerì* for **gerë* (cp. *gerë-ji*) as against *tẽ anẽ* (the latter accented like the subst. *vilkaĩ*), where the difference in accent is remarkable, cp. the dual masc. *gerù* fem. *gerì* as contrasted with *tũ-du tẽ-dvi*; the accentuation of **gerë* is proved to be older by Gr. τοί, καλοί (I § 671 p. 536); on this difference in accent, see Bezzenberger in his Beiträge X 204. We should add the neut. sing. *gẽra* for **-a-d* following **ta(-d)* = Pruss. *s-ta* (§ 227 p. 110), and the neut. pl. *geraĩ* following *taĩ*, e. g. *taĩ geraĩ* 'haec bona (sunt)', see § 428; usually these adjective forms in *-ai* are used as adverbs. From *saldù-s* 'sweet': *saldžiám saldëms* like *tuszcziám tusztëms* (nom. sing. *tùszczia-s* 'empty'), by association with the fem. *saldì saldžiõs* (II § 110 p. 334); cp. Goth. masc. *hardu-s* pl. *hardjái* beside fem. pl. *hardjōs.* The reason why the nom. pl. masc. is *saldūs*, and not *saldì*, like *tusztì*, is that at the time we are now describing, when the case-endings spread from pronouns to adjectives, the

pronominal nom. pl. masc. suffix *-*oi̯* had already driven out the original ending *-*ōs* from all noun stems (§ 314 pp. 214 f.), and thus *-*oi̯* was not regarded as a special ending of the pronouns.

In Armenian the pronominal endings *-um* (dat. loc.) and *-mē* (abl. sing.) could be used with any adjective, as *srbum* (*surb* 'holy') following *orum* ('which') *ailum* ('other'). (In Mod.E.Arm. *-um* extends to substantives, as *mardum*, cp. Lett. *grékam* in the following Remark.) Compare Hübschmann, Ztschr. der deutsch. morg. Ges. XXXVI 123 ff.

Remark. The application of the endings of the pronouns to adjectives must be kept distinct from other examples of these endings transferred to nouns in general, such as Skr. *vṛ́kēṇa návēna* following *tḗna*, Pali loc. *lōkasmiṃ* (instead of *lōkē*) following *tasmiṃ*, abl. *lōkasmā* (instead of *lōkā*) following *tasmā*, Gr. ἵπποι, καλοί following τοί, Lat. *mēnsārum bonārum* following *istārum*, O.C.Sl. *rąkoją novoją* following *toją*. Of course we cannot know whether the adjectives were not sometimes or always the first to adopt this inflexion in these instances, as elsewhere, and then passed it on to substanstives. This was certainly the case in the Lettic dat. instr. sing. *grékam* dat. instr. pl. *grékìm* (*grék-s* 'sin') following the adj. *labbam labbìm* (*lab-s* 'good') and the pronoun *tam tēm* (*ta-s* 'that').

PRONOUNS.[1])

§ 407. The main difference between Pronouns and the great majority of Nouns is that they are formed from peculiar roots, which are called Pronominal Roots. But they also have

1) Many of the works and essays cited in the footnote to page 52, and under the various noun-cases, include a discussion of pronominal forms. We may add here, as dealing with the whole subject of Pronouns, the following.

On the Indo-Germanic Pronouns in general: Bopp, Vergleich. Gramm. II[3] §§ 326 ff. pp. 101 ff. Schleicher, Compendium[4] pp. 608 ff. Fr. Müller, Grundriss der Sprachw. III 563 ff. Pott, Das idg. Pronomen, Zeitschr. der deutsch. morg. Ges. XXXIII 1 ff. Günther, Üb. die Bedeutung und Eintheilung der Pronomina mit bes. Beziehung auf die lat. und gr. Spr., Seebode's Miscell. crit. I 113 ff. Kvíčala, Untersuchungen auf dem Geb. der Pron., bes. der latein., Sitzungsber. der Wiener Ak., 1870, pp. 77 ff. E. Müller, Von dem Pronomen, ein Beitrag zur allgemeinen Sprachlehre, Philol. V 225 ff.

many peculiarities of inflexion, which are accordingly named the Pronominal Declension.

These peculiarities are of three kinds.

1. The Case Ending is usually different from that of the nouns. Compare, for example, the nom. acc. sing. neut. Skr. *tá-d* Lat. *istu-d* as contrasted with *yugá-m jugu-m*. In particular, it is far more common with pronouns than with nouns to give the function of some distinct case to an uninflected form, such as Skr. *mā* Gr. *μὲ* 'me' (cp. § 185 pp. 57 f.).

Aryan. Whitney, Skr. Gramm. pp. 179 ff. Bartholomae, Handbuch der altiran. Dialekte, pp. 102 ff. *Idem*, Die Stellung der enklitischen Pronomina und Partikeln, Ar. Forsch. II 1 ff.

Greek and Italic. M. Schmidt, Comment. de pronomine Graeco et Latino, 1832. Henry, Précis de grammaire comparée du grec et du latin[2] pp. 246 sqq.

Greek. Kühner, Ausführl. Gramm. der griech. Spr. I[2] pp. 445 ff. G. Meyer, Griech. Gramm.[2] pp. 380 ff. The Author, Griech. Gramm. (I. Müller's Handb. der klass. Altertumsw. II[2]) pp. 129 ff. Schmolling, Über den Gebrauch einiger Pronomina auf att. Inschriften, 1882, 1885.

Italic. Kühner, Ausführl. Gramm. der lat. Spr. I 377 ff. Stolz, Lat. Gramm. (I. Müller's Handb. der klass. Altertumsw. II[2]) pp. 345 ff. F. Neue, Formenlehre der lat. Spr. II[2] 178 ff. F. Bücheler, Grundriss etc. (see p. 54). Merguet, die Entwickelung der lat. Formenbildung pp. 141 ff. Kolberg, De antiqua pron. Latinorum forma, 1838.

Keltic. Zeuss-Ebel, Gramm. Celt. pp. 324 sqq. Stokes, Ir. Pronominal-Declination, Kuhn-Schleicher's Beitr. I 468 ff. *Idem*, Celtic Declension pp. 100 ff. Ebel, Kelt. Studien: Das Relativum, Infigierte persönliche (und demonstrative) Fürwörter, Notae augentes, Kuhn-Schleicher's Beitr. V 17 ff.

Germanic. Grimm, D. Gr. I[2] (1870) pp. 702 ff. Kluge, Noreen, Behaghel, Paul's Grundriss der german. Philol. I 391 ff., 498 ff., 627 ff. Rumpelt, Die deutschen Pronomina und Zahlwörter, 1870. Braune, Got. Gramm.[3] pp. 60 ff. *Idem*, Althochd. Gramm. pp. 195 ff. Witte, Bemerkungen über das neuags. Pronomen, 1877.

Balto-Slavonic. Smith, Bemerkungen über die primitiven Fürwörter der balt. und slav. Sprachen, Kuhn-Schleicher's Beitr. II 330 ff., III 97 ff., 129 ff. Leskien, Die Declinat. im Slav.-Lit. und Germ., 108 ff. Schleicher, Litau. Gramm. pp. 194 ff., 216 ff. Kurschat, Gramm. d. littau. Sprache pp. 229 ff. Bezzenberger, Beitr. zur Gesch. d. lit. Spr. pp. 161 ff. Miklosich, Vergleich. Gramm. der slav. Spr. III[2] pp. 44 ff. Leskien, Handb. der abulg. Sprache[2] pp. 80 ff.

Works treating specially of pronouns with gender distinguished, or of personal pronouns, will be cited in notes to § 408 and § 433.

These differences in flexion were clearly more or less connected with a certain vagueness which is seen in the cases of pronouns. Pronominal forms were not originally so minutely subdivided or so clearly defined as were the cases of the noun. It was only the constant endeavour to express similar uses by similar forms which brought about the more ocmplete agreement of pronouns with nouns, as we see it in the historical developement of different languages.

2. A number of cases from pronoun stems have always been extended by certain suffixes which were placed before the case-ending, to aid in distinguishing the cases. In these the case-ending is sometimes one peculiar to pronouns, and sometimes it is common to them with nouns. The most important of the elements thus interwoven into the cases of pronouns are *-sm-* and *-si̯- -s-*. Examples: Skr. loc. *tá-sm-in* abl. *tá-sm-ād* (cp. *vṛ́kād*), although the acc. is *tá-m* 'that' (cp. *vṛ́ka-m*); Avest. abl. *yū-šm-aþ*, but nom. *yū-š* 'vos'; dat. Skr. *tá-sy-āi* Goth. *þi-z-ái* (cp. Ved. *suvapatyāí* Goth. *gibái*), but acc. Skr. *tā́-m* Goth. *þō* f. 'the, this, that' (cp. Skr. *áśvā-m*).

How these particles got into the words can generally be seen without difficulty. We shall explain the forms in detail in the succeeding paragraphs. Such a word as "insertion" cannot properly be used of any them.

3. Cases of pronouns, more frequently than nouns, attract certain particles which become affixed to them (cp. § 186 p. 62). For example: **-em *-om *-m* in Skr. *id-ám* 'id, hoc' *im-ám* 'eum, hunc', *vay-ám* 'nos'; *-u* in the nom.-sing. O.Pers. *ha-uw* Gr. **o-ú* 'that yonder' (in *οὗ-τος*); *-i* in the nom. sing. Lat. *qo-i quī*, O.Sax. A.S. *sē* 'that' for **so-i̯*, and others. If we turn to recorded languages, we find actually used such affixes as Gr. *-ī* in *οὗτοσ-ί*, Lat. *-ce* (*-c*) in *hīs-ce*, with a deictic or emphatic meaning. Just so must the former affixes have once had their own proper meaning, although we are now in the dark as to what it originally was. After their ground-meaning became weakened and obscured they became

no more and no less than case-suffixes; the stock example is Goth. *mi-k* O.H.G. *mi-h* = Gr. *ἐμέ-γε* (beside *ἐμέ μέ*).

Remark. It may be pointed out in passing that the principle exemplified in the attaching of these affixes, deictic, emphatic, and so forth, to words is well suited to throw light on the origin of the proethnic Indo-Germanic case-forms. The principles on which the older cases were built up must be the same as those which we can trace in these later forms. The formation of cases is not something which took place once for all at a definite point in the proethnic period; it has always been going on afresh, although to a much smaller extent in historical times than in prehistoric. At this very day we can see the beginnings of inflected cases, as Mod.H.G. *heimat-wärts* 'home-wards', *stadt-wärts* 'town-wards', *thal-wärts* 'vale-wards', and the like.

Pronouns are usually classified thus: those with distinguishable Gender (Demonstrative, Relative etc.), and those without distinguishable Gender, or Personal Pronouns. We discuss Possessive Pronouns along with the Personal Pronouns (§§ 450 ff.), because the two are so closely connected, especially in the forms of the genitive case.

Pronouns in which the Gender in distinguished.[1])

§ 408. A number of these pronouns did not form all their cases in the original language from the same stem, but filled up certain gaps from others: for example, **so-* and **-to-*

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1) Add to the works cited in the footnote to pages 322 f.:

Scherer, Zur Gesch. d. deutsch. Spr.[2] pp. 490 ff. Leo Meyer, Vergleich. Gramm. I[2] 577 ff. Steinthal, De pronomine relativo etc., 1847. Windisch, Untersuch. üb. d. Ursprung des Relativpron. in den idg. Sprachen, Curtius' Stud. II 201 ff. Schoemann, Bedenken und Fragen über die pronomina indefin. und interrog., Hoefer's Zeitschr. f. d. Wiss. d. Spr. I 241 ff. Bréal, Le thème pronominal *da*, Mém. d. l. S. d. l. I 193 ff., 276.

I. H. Hall, The Declension of the Definite Article in the Cypr. Inscr., Transactions of the Amer. Phil. Assoc. XI (1880) pp. 51 ff. Schanz, Novae commentat. Platonicae [*ταὐτό* und *ταὐτόν* u. dgl., *οὕτως* und *οὕτω* etc.] 1871. Lottner, *εἷς* und verwandte Pronominalbildungen, Kuhn's Zeitschr. V 396 f. Savelsberg, Das [griech.] pronomen relat., aus dem interrog. entstanden, Kuhn's Zeitschr. VIII 408 ff. Lottner, Der griech. Relativstamm, *ibid.* IX 320. Kratz, Quaestiones Homericae I: De pro-

together made up the cases of 'this, the' (Gr. nom. ὁ gen. τοῦ etc.). In the separate languages these heteroclite forms were levelled down and assimilated more or less, so that the groups became more homogeneous. These levellings, together with the composition of simple original pronoun stems with each other or with deictic and other particles, produced a large number of analogical forms in the different branches of Indo-Germanic; and pronoun forms as we have them are

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nomimum ὅς et ὅστις natura etc., 1854. Otto, Beiträge zur Lehre vom Relativum bei Homer, 1859, 1864. Hentze, De pronominum relativorum linguae Graecae origine atque usu Homerico, 1863. Lammert, De pronominibus relativis Homericis, 1874. Wackernagel, Die [griech.] indefiniten Relativa, Kuhn's Zeitschr. XXVII 89 ff.

J. Schmidt, Zur Decl. der lat. geschlechtigen Pronomina, Kuhn's Zeitschr. XIX 196 ff. L. Havet, *Isto-*, *eis eisdem*, *illĕ istĕ*, *qui hic*, Mém. Soc. ling., II 234 f. Heffter, Üb. das ursprüngl. pron. demonstr. der lat. Spr. etc., Jahn's Jahrbb., IV. Suppl., 104 ff. Osann, Comment. gramm. de pronominis tertiae pers. *is ea id* formis (with Excursus on other Pronouns), 1845. F. W. Schmidt, Quaestiones de pronominum demonstrativorum formis Plautinis, 1875. Prehn, Quaestiones Plautinae de pronominibus indefinitis, 1887. Niemöller, De pronom. *ipse* et *idem* ap. Plaut. et Ter., 1887. Fleckeisen, Über die Femininform im nom. plur. des Pronomen *hic haec hoc*, Rhein. Mus. VII 271 ff. F. W. Schmidt, Die Pluralformen des Pron. *hic* bei Plaut. und Ter., Hermes VIII 478 ff. Meunier, De quelques anomalies que présente la déclinaison de certains pronoms lat., Mém. Soc. ling. I. 14 sqq. Brandt, De varia quae est apud veteres Romanorum poetas scaen. genetivi sing. pronominum forma ac mensura, 1877. Danielsson, De gen. et dat. pronominum Lat. in *-īus* et *-ī* desinentibus, Studia gramm. (Upsal. 1879) pp. 1 ff. L. Havet, Sur les génitifs pronominaux en latin, Mém. Soc. ling. III 187 ff. Luchs, Zur Lehre von der Genitivbild. der lat. Pron., Studemund's Stud. I 316 ff. Wichmann, De *qui* ablativo, 1875.

Windisch, Der irische Artikel, Rev. Celt. V 461 ff. D'Arbois de Jubainville, Rech. sur l'hist. de l'article dans le bret. armor., *ibid.* II 204 ff.

Hoefer, Das Pronomen *diser*, Germania XV 70 ff. J. Grimm, *Wer*, Zeitschr. f. deutsche Altert. VII 448 ff.

Schleicher, Das Pronomen lit. *szi*, slav. *sĭ* = got. *hi* ground-form *ki*, Kuhn-Schleicher's Beitr. I 48 f. Miklosich, Über den Ursprung einiger Casus der pronominalen Declination [des Slavischen], Sitzungsber. der Wiener Ak. LXXVIII 143 ff. Idem, Über die Genitivendung *-go* in der pronominalen Declination der slav. Sprachen, *ibid.* LXII 48 ff.

often separated from their Indo-Germanic prototype by one long line of re-formations due to analogy.

It is impossible withein the limits of this work to describe with any degree of completeness all these analogical formations in the various languages of our group. We can only give a general summary of the stems which are found in several languages, and which are therefore to be regarded as proethnic, subjoining their most important inflexions.

1. *Etymology and Morphology of Pronouns with Gender.*

§ 409. Demonstratives.

The Stems **so- *sā-* and **to- *tā-*. In the parent language the *s*-stem probably made only the nom. sing. masc. and fem., and the *t*-stem all other cases. By degrees one or other invaded the other's ground; examples are Ved. loc. *sásmin* instead of *tásmin*, Gr. nom. *οἱ αἱ* instead of *τοί ταί*, and conversely Lith. nom. *tà-s tà* instead of **so(-s) *sā*. Aryan: nom. sing. masc. Skr. *sá sá-s* Avest. *hō* fem. Skr. *sā́* Avest. *hā*; acc. sing. masc. Skr. *tá-m* Avest. *te-m* fem. Skr. *tā́-m* Avest. *tąm*. Armen. *-d*, a demonstrative affix, beside Idg. **to-*, e. g. *tēr-d* 'the master, this master', *da* 'this' *do-in* 'the same'; *d-*, for *t-*, is doubtless strictly regular only after *r* and *n* (cp. I § 483 p. 357), as in *du* 'thou' (§ 440). Gr. *ὁ ἡ*; *τό-ν τή-ν*. O.Lat. *sa-psa* 'ipsa', also **so-* in *ip-se ip-sa* (§ 413); **to-* in *topper* = **tod per*, and *tam*; in Italic the stem **e-so-* (*e-* as in Skr. *a-sāú* Gr. *ἐ-κεῖ* Osc. *e-ko-* 'hic' Lat. *e-quidem* Osc. *e-tanto* 'tanta') combined with **to-* and formed **es-to-*, as in Baltic **k̑o-* + **to-* made **k̑-to-* (Lith. *sztái* Pruss. *s-ta-s*), whence Umbr. estu 'istum', with which Lat. *isto-* is closely connected, if not identical.[1]) O.Ir. *so* a demonstrative

1) No satisfactory explanation has been suggested for *i-* in *iste*. Since, however, *e-* is doubtless the same stem as the pronominal stem **o-* which is shortly to be described (see next page), it is quite possible that *i-* in *iste* is the stem of *i-s* 'he'. This stem has also been identified with the locative suffix *-i*, in *ποιμέν-ι* etc.; and if this is correct, the

particle meaning 'here', Gall. *so-sin nemeton* 'hoc sacellum'; the stem *to-* is found in *ua-d* 'ab eo' *ua-di* 'ab ea' *ua-dib* 'ab eis' and others like them, and in the article *in-d* for **sen* + *to-* (cp. Windisch, Revue Celt. V 462; **to-* doubtless became *do-* in syllables coming just before the accent, cp. vol. I p. 510, and Thurneysen, Rev. Celt. VI 321, footnote 1). Goth. *sa sō* 'this, the' m. f. O.Sax. A.S. *sē* m. 'the, this' O.H.G. *de-se* m. 'this'; Goth. *þana* O.H.G. *den* acc. m. 'this, the'. Lith. *tą̃* O.C.Sl. *tŭ* 'the, this' m., Lith. *tą̃* O.C.Sl. *tą* 'the, this' f.

The Stems **s̯i̯o-* **s̯i̯ā-* and **ti̯o-* **ti̯ā-* (also found with *-ii̯-* instead of *-i̯-*). In Aryan, they were distributed among the cases in the same way as **so-* **to-*. Skr. nom. *syá syā́* acc. *tyá-m tyā́-m* nom. acc. *tyá-d*, O.Pers. nom. *hya hyā* acc. *tya-m tyā-m*. O.Ir. *co-se* 'ad hoc, adhuc' *re-siu* 'hitherto'. O.H.G. *siu* = Skr. *syā́*, instr. sing. neut. *diu*, nom. acc. pl. neut. *diu*, nom. pl. fem. *deo dio*. Whether the *-i̯o-* of **s-i̯o-* **t-i̯o-* be called the same as the suffix of comparison *-i̯o-*, discussed in II § 63 pp. 132 f. (**t-i̯o-* : **to-* = Skr. *an-yá-* : *aná-*), or identified with the demonstrative pronoun stem **i̯o-* (pp. 331 f.), compounded here with other stems, it all comes to the same thing. Compare also the nom. sing. fem. in *-ī* Goth. *s-i* O.Ir. *s-ī* 'ea' (II § 110 p. 339), perhaps connected with Sophocles' ἡ (cp. the Author, Ein Problem der hom. Textkr., 125 ff.; Meister, Gr. Dial. II 281), beside which we have the fem. **ī* in Skr. *iy-ám* etc. (p. 332); — here the same thing looked at from different points of view, and occurring at different stages of the growth of language, might be called variously a suffix or part of a compound word.[1])

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following equation holds good: — Umbr. *e-sto-*: Lat. *i-sto-* = loc. Gr. ποιμέν-ι: O.C.Sl. *kamen-e* (compare also Lith. *raňkoj-e* Skr. *vṛ́kāy-a*); on this postposition *-e*, see further § 186 p. 62, § 246 p. 145, § 257 pp. 158 f. The two positions of the stem in these compounds may be illustrated by Lat. *ce-do* : *hī-ce*.

1) Whether *-i̯o-* in the Indo-Germanic languages (see II § 63 pp. 122 ff.) is *always* identical with the pronoun **i̯o-* I leave an entirely open question. For the present I assume merely a resemblance between the pronoun and the *-i̯o-* of comparison.

The Stem *o- *ā-. Aryan: dat. sing. masc. Skr. *a-smāí* Avest. *a-hmāi* dat. abl. pl. fem. Skr. *ā-bhyás* Avest. *ā-byō*. O.Ir. *ē* 'he' see § 414, gen. *ai ae* 'eius' see § 418. Germ. gen. sing. Goth. *i-s* O.H.G. *e-s*: cp. Skr. *a-syá*. Elsewhere it is not found as part of a living case-system. Greek loc. *ε-ἰ* (in clauses expressing a wish or a condition) and instr. (Heracl. Cret. etc.) *ἦ* 'if', *εἶ-τα* 'then'. The same loc. **e-i̯* is doubtless contained in Idg. **ei̯-so *ei̯-sā*, meaning 'this here' or something to that effect, acc. **ei̯-to-m* etc.: Skr. *ē-ṣá ē-ṣā́* Avest. *aẹ-ša aẹ-ša*, acc. *ē-tá-ṁ aẹ-te-m*, Umbr.-Osc. **ei̯-zo-* (the *-z-* of the nom. sing. masc. fem. was carried through all the cases), Umbr. *ere* 'is' for **ē-ro* (§ 274 Rem. p. 174), eru-ku 'cum eo' era-k abl. 'ea' Osc. eísúd 'eo' *eizois* 'eis' eísa-k *eiza-c* abl. 'ea'. The bare stem, *e*, may be contained in Lat. *e-quidem* and other words of the same sort; in the loc. O.C.Sl. *kamen-e* and the like, see p. 327 with the footnote; and in the augment, as Gr. *ἔ-φερον*; compare loc. **te* § 424 p. 349.

The Stem **eno- *enā-*, **ono- *onā-*. Ar. *ana-* 'this, that, he': instr. sing. Skr. *anēna anáyā* Avest. *ana*. Lith. *anà-s añs* 'that' fem. *anà*, O.C.Sl. *onŭ* 'that, he' fem. *ona*. Also, doubtless, the Armenian article *-n*, e. g. *tēr-n* 'the lord' beside *no-in* 'the same', and *in-kn* 'ipse', for **eno-*.

The Stem **a^x u̯o- *a^x u̯ā-*. Ar. *ava-* 'that, that yonder': Skr. gen. dual *avóṣ*, nom. pl. Avest. *avē avå* O.Pers. *avaiy avā* (cp. Bartholomae, Kuhn's Zeitschr. XXIX 498). O.C.Sl. *ovŭ* 'this'. Wackernagel conjectures that this same stem is contained in Lat. *ō-lim* (*ibid.*, XXVIII 139), with which should be connected Umbr. *ulo* ulu 'illuc'.

The Stems **k̂o- *k̂i- *k̂i̯o-*.

**k̂o-*. Gr. loc. *ἐ-κε-ῖ* 'there' *κεῖνο-ς* Dor. *κῆνο-ς* 'that' (cp. II § 67 Rem. p. 150, Prellwitz, Bezz. Beitr. XV 154 ff.). Osc. e-kas 'hae' *e-cu-c* neut. 'hoc'; of Latin forms we may doubtless add *ce* in *ce-do hī-ce hī-c* (cp. Osc. *ce-bnust*); *e-* in *ἐ-κεῖ* e-kas as in Osc. *e-tanto* 'tanta' etc., p. 327. O.Icel. *hann* 'he' *hon* 'she', O.Sax. *hē hie* O.H.G. *hē her* 'he', unless the last-named were made from the stem *hi-* on the analogy

of *thē* etc. (§ 414). Also Lith. *szẽn* and *szè* 'hither' may belong to this same group; but it is just as likely that they come from **szi̯en *szi̯e* (I § 147 p. 131) and belong to the stem *szia-* (see below), being made on the analogy of the forms *tẽn tè*.[1]).

**k̑i-*. In Greek, we may conjecture that this form is to be seen in the κί of οὐ-κί, πολλά-κι and other words; see § 182 p. 49. Lat. *ci-ter ci-trā*, Umbr. sì-mu 'ad citima, retro'. O.Ir. *cē* 'on this side'. Goth. *hi-mma* 'to this'. Lith. *szì-s* O.C.Sl. *sĭ* 'this'. Cp. also Alban. *si-viét* 'in this year'.

Whether the Armenian affix *-s*, as *tēr-s* 'the lord, this lord', belongs to **k̑o-* or **k̑i-*, cannot be decided.

**k̑i̯o-* (compare **ti̯o-* beside **to-*, above) may also be an old form: Gr. σήμερον Att. τήμερον adv. 'to-day' for **κι̯(ο)-ᾱμερο-ν* (known phonetic laws give no justification for deriving this from **ti̯o-*); O.H.G. instr. *hiu-tu* O.Sax. *hiu-diga* 'on this day, to-day'; gen. sing. Lith. *sziõ* O.C.Sl. *sego* instead of **šego* following *sĭ*. Compare also the fem. formation A.S. *hī* Lith. *szì* O.C.Sl. *si* for **k̑ī*, like O.Ir. *sī* Goth. *si* (see p. 328).

A contamination of **k̑o-* and **to-* produced Balt. **k̑-to-*, represented by Lith. *sztái* 'see here' (its opposite is *antái* 'see there' from *anà-s* 'that yonder') and Pruss. *s-ta-s*. *sz-ta-* : *ta-* = *sz-ia-* : *ja-*[2]). Lith. *szìta-s* is a re-formate of later date, following *szì-s*. In a similar way arose in Oscan, by contamination of *eko-* and *eso-* (eseí ἐσοτ etc.) a stem *ekso-* (*exac* 'hac' etc.), a form which sprang up during the period of separate dialects (for pr. Umbr.-Samn. **ekso-* would have become **ehso- *esso-*, cp. nom. sing. medíss 'meddix').

Remark 1. If there was in pr. Idg. a variation between *tenues* and *tenues aspiratae* analogous to the variation of *mediae* and *mediae aspiratae* (I § 469. 8 pp. 346 f.) in favour of which view might be adduced Gr. πλατύ-ς beside πλάθανο-ν Skr. *pṛthú-ṣ*, Gr. τέταρ-το-ς Lat. *quar-tu-s* beside Skr. *catur-thá-s*, Gr. πάτο-ς πόντο-ς beside Skr. *path- pánthā-*, Gr. ἔστη-ν

1) Conversely, Lith. *teĩp* beside *taĩ-p* 'so' was modelled after *szeĩ-p* i. e. *sziaĩ-p* (neut. pl., see § 428).

2) The suggestion that *s* in *s-ta-s* is the same as *s* in Lat. *iste* (I p. 425 footnote 2) in less probable.

beside Skr. *ásthā-m* etc. — the Lat. pronoun *ho-* (*hī-c*) could be added in this place. It would be derived from **k̑ho-*. But then the question would arise whether we should not derive Goth. *hi-* from **k̑hi-*, Gr. *σ- τ-* in *σήμερον τήμερον* from **k̑hi̯o-*, and other words from similar forms.

The Stem **i- *ei̯-* (**i̯-o- *ei̯-o-*). Aryan: neut. Skr. *i-d* (adv.), *i-d-ám* with the particle *-ám* affixed, Avest. *i-þ* (adv.), acc. sing. masc. Skr. *i-m-ám* Avest. *imem* O.Pers. *imam* also with the particle *-am*; the association of this accusative form with *ētá-m aete-m* etc. suggested a number of analogical forms: fem. Skr. *imā́-m* Avest. *imąm* O.Pers. *imām*, neut. Skr. *imá-d* Avest. *imaþ* O.Pers. *ima*, pl. Skr. *imḗ* Avest. *imę̄* O.Pers. *imaiy* etc. In Greek there are only isolated forms: acc. *ἵ-ν* 'eum' *μὶν* for **σμ' ἰν* (*σμ'* = Skr. *sma*), *νὶν* for **νϝ ἰν* (**νϝ* = *νν̀*), see Thumb, in Fleckeisen's Jahrb. 1887 pp. 641 ff.; adv. (instr.) *ἵνα*, used in relative sentences (§ 410), instead of **ἰ-να* (§ 421), which took its rough breathing from the relative *ὅ-*, as Lith. *jì-s* instead of **i-s* took its initial from *ja-* (see below). Lat. *i-s i-d*, *eō ea-m*, Umbr. *eam* 'eam' eaf 'eas' Osc. ío-k 'ea', Ital. *eo- eā-* for **ei̯o- *ei̯ā-* (I § 134 p. 121); on Lat. *iī iīs* beside *eī eīs* see Thurneysen, Kuhn's Zeitschr. XXX 499 f. Whether O.Ir. *ed* 'it' should be added to the list will remain doubtful so long as its ending is not explained.[1]) Goth. *i-s* O.H.G. *i-r* 'he', Goth. *ija* 'eam'; and doubtless Goth. *jáin-s* and O.H.G. *jenēr* 'that yonder', although the construction of their stems is not quite clear (cp. I § 123 p. 113, Holthausen in Paul-Braune's Beitr. XI 552 f., Singer *ibid.* XII 211, Lidén in the Arkiv f. nord. fil. III 242 f., Johansson in Bezz. Beitr. XVI 154 ff., who gives references to other works on the subject). In Balto-Slavonic we have **i̯o-* in the gen. Lith. *jõ* O.C.Sl. *jego*

1) A ground-form *id-om* might be inferred from *edn-on-oen* 'the very same', but that there is no nasal in *ed-on* (used with the meaning of Lat. 'id est'). The inserted pronoun (*pronomen infixum*) *-d-* (*-id-*?), used for all genders and numbers — if we are right in placing it here — causes aspiration, and therefore ended in a vowel originally. A ground-form **idō* is hardly possible, since before *-u* (for *-ō*) the *i* would have been preserved. (Based on Thurneysen.)

'eius' etc. beside nom. Lith. *jì-s* O.C.Sl. *-jĭ* (in *dobrŭ-jĭ* and the like, but *i* in *i-že* 'qui') instead of **i-s* (= Lat. *i-s*) with *j-* from the other cases; cp. I § 84 Rem. 1 p. 80; Streitberg, Paul-Braune's Beitr. XIV 195 f.; J. Schmidt, Pluralb. 43.

Remark 2. The pronoun *jìs jĭ* (declined) was affixed to inflected adjectives in Balto-Slavonic; and out of this grew what is called the 'definite adjective', as Lith. *geràs-is* O.C.Sl. *dobrŭ-jĭ dobryjĭ* 'the good (man, etc.)' (I § 84 p. 80). Form-association brought about a variety of changes in the case-systems of these words. See Leskien, Decl. pp. 131 ff.

**ī*, a fem. of **i-s*, is preserved in Skr. *iy-ám* Avest. *īm* i. e. *iy-em* and in Lith. *jì* instead of **ì*, earlier **í*, as *jì-s* stands instead of **i-s*; perhaps also in Cypr. *ἴ-ν* 'αὐτή' (Meister, Gr. Dial. II 281), with the particle *-m*.[1]) Compare **k̑ī* beside **k̑i-s*, on the last page.

§ **410.** The Relative. From the proethnic period **i̯o-* has been used for the relative pronoun. Skr. *yá-s yá-d yā́*, Avest. *yō ya-ṗ yā*. Gr. *ὅ-ς ὅ ἥ*. Connected with it are adverbs like Goth. *ja-bái* Lith. *jéi jeĩ* 'if', and derivative adjectives such as Gr. *οἷο-ς* 'qualis' *ὅσο-ς* 'quantus' O.C.Sl. *jakŭ* 'qualis' *jelikŭ* 'quantus'. There can be no doubt that this **i̯o-* is the same as the anaphoric **i̯o-* and **i-* discussed in § 409 above. The identity of these is made clear in Gr. *ἵνα* for **i-na* (see above), for *ἵνα* : *ὅ-ς* = Lith. *(j)ì-s* : *jõ*. Thus **i̯o-* came to be used as a relative in the proethnic language without losing its purely anaphoric value. The chief reason why the anaphoric use survived in Balto-Slavonic was doubtless the association in use with nom. **i-s* acc. **i-m* (Lith. *j-ì-s j-ĩ* O.C.Sl. *j-ĭ*), which were always demonstrative. Whether the Goth. relative particle *ei* in *sa-ei* etc. is Idg. **ī*, the instr. of **i-s* (§ 421), or **e-i̯*, the loc. of **o-* (p. 329), I leave undecided.

The relative use of **qo* and **to-* in several languages came in later. See the Syntax.

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1) Mid.Ir. *ī* was coined beside *sī* because of other pairs of forms — *ē* and *sē*, *iat* and *siat*. (Based on Thurneysen.)

§ 411. Interrogative and Indefinite Pronouns. The stems **qo- *qi- *qu-*, from the proethnic stage onwards, had an interrogative meaning with the acute accent, and were indefinite when unaccented. The use of these pronouns for the relative, as was but now remarked (§ 410), is later in origin.

**qo- *qā-*. Skr. *ká-s kā́*, Avest. *kō kā*. Gr. gen. Hom. *τέ-ο* Att. *τοῦ* = Avest. *ca-hyā*, and such adverbs as *ποῦ ποῖ*, Dor. *πᾷ* Att. *πῇ*. Lat. *quo-d quā*, Umbr. *poei poi* 'qui' *paf-e* 'quas' Osc. *pod* 'quod' paam 'quam'. O.Ir. *cia* Mod.Cymr. *pwy* 'who? what?' for **kue-i̯* (§ 414), O.Ir. *cā-ch* O.Cymr. *pau-p* quivis'. Goth. *hva-s hvō*, gen. *hvi-s* O.H.G. *hwe-s*. Lith. *kà-s* O.C.Sl. *kŭ-to* 'who?' Uninflected **qe* 'how' (indefinite 'somehow', and 'as also' = 'and'): Skr. Avest. *ca* Gr. *τε* Lat. *-que* Goth. *-h*.

qi-*. Aryan: neut. Skr. *ci-d* Avest. *ciþ* O.Pers. *ciy* generalising particle 'any', masc. Avest. *ci-š* O.Pers. *ciš-ciy*; Skr. *kí-m* 'what?' *ná-ki-ṣ* 'no one' with *k-* instead of *c-* taken from *ka-*, see I § 448 Rem. p. 333. Gr. *τί-ς τί*. Lat. *qui-s qui-d*, Umbr. sve-pis 'si quis' *pif-i* 'quos' Osc. *pi-s* 'qui' pí-d 'quid'; Lat. *quem* doubtless instead of **quim* = Osc. *pim* by analogy of *ovem* : *ovi-s* (§ 214 p. 92), and similarly *em* instead of *im*, and used side by side with it, from *i-s* (J. Schmidt explains differently, Plur. p. 62 footnote 1). O.Ir. *ce ci* 'which?' may belong to this stem, or it may be *cia* (cē*) shortened by a pretonic position. Germ. *hvi-* perhaps in Goth. *hvi-leiks* A.S. *hwi-lc* 'how constituted?' O.C.Sl. *čĭ-to* 'quid?'

**qu-*. Skr. *kú-tra* Avest. *ku-þra* 'where? whither?', Skr. *kú-tas* 'whence?' We may suggest that this is the root of O.C.Sl. *-gda* for **k(ŭ)-dā* in *tŭ-gda* 'then' and other words (Kozlovsky, Arch. für slav. Ph. X 658). There is great doubt whether it has anything to do with Lith. *ku-r̃* 'where, whither' and Lat. *ali-cubi* Umbr. *pu-fe* Osc. pu-f 'ubi'.

Remark. The etymology of Armen. *o* 'who?' *i* 'what?' and Lat. *u-bi u-ter* has so far not been explained. Bugge (Beitr. zur etym. Erl. der arm. Spr., 28 f.) would postulate Idg. **go- *gi-* as by-forms of **qo- *qi-*. But by this nothing would be gained as far as Armenian is concerned, since **go-* would have become *ko-*, cp. *kov* 'cow' etc. I § 456 p. 336,

§ 484 p. 338. On the *u-* of the Latin words see further I § 431 Rem. 3 p. 321; Deecke in a Programm of Colmar, 1887, pp. 37 f.; Kozlovsky, Kuhn's Zeitschr. XXX 563 f.; and Stolz, Lat. Gr.[2] § 46 Rem. 1 p. 290.

Indefinite **sm̥mo-* 'some one' (connected with **sem-* 'unus'): Skr. *sama-* Gr. *ἁμό-* Goth. *suma-*.

2. *Cases of Pronouns in which Gender is Distinguished.*

§ **412.** In the preceding pages it has often been pointed out how many inflexions pass from pronouns to nouns. This, as we have seen, happened in some instances as early as the proethnic period. *Vice versa*, case endings sometimes pass from nouns to pronouns. This happens particularly in Greek and Keltic. In the historical period of these languages very few pronouns remain which show the special suffixes which they had in the parent language.

It is certain that in some of their cases pronouns varied in their endings, sometimes having the same ending as a noun, and sometimes a different one. Take as examples nom. sing. **so* (Skr. *sá*) beside **qo-s* (Skr. *ká-s*), abl. sing. **tesmōd* (Skr. *tásmād*) beside **tōd* (Skr. *tā́d*). In such instances we have no right to assume that the pronominal ending was once exclusively used, and that the noun ending only came in by analogy. On the contrary, as we shall see, it can be made probable that in many cases the ending was originally the same in both noun and pronoun, and that the varying inflexion belongs to a later date. It seems, for instance, that in **tōd* : **u̯lq̑ōd* (Skr. *tā́d* : *vṛ́kād*) the agreement is original, while **tesmōd* (Skr. *tásmād*) is **tōd* transformed by association with the locative **tesme *tesmin* (Lith. *tamè* Skr. *tásmin*); see § 424 p. 349.

We may now consider the special pronominal endings in detail. The acc. sing. masc. fem. and the acc. pl. masc. fem. may be passed over, since in these cases nouns and pronouns always had the same endings. All that is needed is a note

upon Goth. *þan-a* 'the, that', which will be found in § 417 Rem. On O.Ir. acc. pl. masc. *inna* cp. § 326 p. 226 and p. 355 footnote 1.

Nominative Singular Masculine and Feminine.

§ **413.** Side by side with masc. forms in *-o-s* as **qo-s* 'who?' (= Skr. *ká-s*, O.Ir. *ne-ch* for **ne-kṵo-s*, Goth. *hva-s*, Lith. *kà-s*) was **so* 'this, that': Skr. *sá*, Avest. *hā* and *aẹ-ša* = Skr. *ē-ṣá* (Jackson, Am. Or. Soc. Proc. 1889 p. cxxvi), Gr. *ὁ*, Goth. *sa*, probably also Lat. *ip-se* for **-so*, *iste* instead of **isse* for **is-so* and the like (I § 81 pp. 73, § 568 p. 425), Umbr. *ere* 'is' = **eḭ-so* Skr. *ē-ṣá* (cp. § 409 p. 329). Perhaps even in the parent language there was a form **so-s*: cp. Skr. *sá-s* Gr. *ὅ-ς* (*ἡ δ' ὅς* and the like) Lat. *ip-su-s* beside *ip-se*. The fem. was **sā*: Skr. *sā́* Gr. *ἡ* Lat. *ip-sā* Goth. *sō*.

§ **414.** There were forms from *o-* and *ā-* stems ending in *-oḭ -eḭ* and *-aḭ*, in which *-ḭ* was a deictic element, which we may conjecture to be the same as *-ĭ* in the loc. sing. and pl., see § 256 p. 157, § 356 pp. 256 f. Compare too the Lith. masc. vocative in *-ai*, as *tĕvai*, and the Skr. fem. voc. in *-ē*, as *áśvē* (§§ 201, 202 pp. 83 f.).

1. The stem *o-*. Skr. *ay(-ám)* Avest. *aẹm* i. e. *ay(-em)* 'this', cp. Skr. *sva-y(-ám)* 'oneself' and *va-y(-ám)* 'we' § 441. To this stem probably belong O.Ir. *ē* 'he' for **e-ḭ* (but cp. § 416), and perhaps Gr. *ὁδεῖν* = *ὅδ' εἶ-ν* with the particle *-m* (*εἶ-ν*: Skr. *ay-ám* = Boeot. *τού-ν* Hom. *τῡ́-ν-η*: Skr. *tuv-ám tv-ám*), with which are connected *τουδεῖνος* etc., later analogical formations (cp. J. Baunack, Stud. auf dem Geb. des Gr. I 46 ff.).

The stem **qo-* (interrog. and indef.). Lat. *quī*, O.Lat. (Dvenos-inscr.) *qoi* Osc. *poi* 'qui'; but Umbr. *poei poi poe* is a dissyllable, and so doubtless a compound of **poḭ* with *-ei -i* (cp. nom. pl. *pur-i* pur-e etc.). O.Ir. *cia* (for **cē*) Mod.Cymr.

pwy 'who' for **kṵe-i̯*; cp. the frequent occurrence of "initial aspiration" (I § 658. 1 pp. 510 f.) in *cia chruth* 'how?' properly 'what (is) the kind?' and in Mod.Cymr. *pwy bynnac* 'whosoever (*pynnac*)'.

Lat. *hī-c* for **hoi-ce*, like *quī*.

O.Sax. A.S. *sē* 'this, that, the', identical with the indeclinable Goth. *sái*, which is an unaccented affix in O.H.G. *de-se* 'this' (gen. *des-se*) Norse Run. *sa-si* 'this' (fem. *su-si* neut. *þat-si*). O.Sax. O.H.G. *thē thie* A.S. *þē* instead of *sē* by association with the stem *to-* (cp. Lith. *tà-s* instead of Idg. **so *so-s* and the like). Further, O.Sax. *hē hie* O.H.G. *hē*, cp. § 409 p. 327. O.H.G. *jenē-r* was made by adding to *-ē* = **-oi̯* the nom. sign *-r* = **-z* (cp. *i-r e-r* = Goth. *i-s*) — this explanation of *-ēr* makes it possible to see why it was not shortened to *-ĕr*, cp. *muoter* for pr. Germ. **mōđēr* § 192 p. 71; — from this analogy came *blintēr*, see § 406 p. 321; as to *unsēr* gen. *unseres* beside *blintēr* gen. *blintes* see § 455. A different explanation of *jenēr* is given by Johansson in Bezz. Beitr. XVI 121 ff., where other older explanations are cited and criticised. O.H.G. *der*, *her* are not shortened forms of **dēr*, **hēr*. Two origins are possible. (1) To *de*, *he* = *thē*, *hē*, which arose in a position where they had no accent (though afterwards they could be used with the accent too) was added the nom. *-r* (cp. O.H.G. *de-se* as contrasted with A.S. *đē-s* 'this'). (2) Or *der* took the place of **dar* = Lith. *tà-s*, taking *e* from the gen. *des* etc., as did the acc. *de-n*. The latter view is favoured by *hwer wer* (acc. *we-n*) beside Goth. *hva-s*.

Lith. *tasaĩ* 'this' is doubtless for *tas*+*sai*, not *tas*+*ai* (cp. Bezzenberger, Beitr. zur Gesch. der lit. Spr., 174).

2. Feminine forms ending in Idg. **-ai̯*, as the nom. acc. pl. neuter (§ 428). Avest. *þwōi* 'tua' *xwaę(-ca)* f. 'one's own' (Bartholomae, Ar. Forsch. II 173), which suggested noun forms like *ber*ᵉ*xđę̄* f. 'blessed' (§ 190 p. 67). Perhaps this *-ai̯* is the same as the Ar. ending for the voc. sing. of *ā*-stems (Skr. *áśvē*), see § 202 p. 84. Lat. *hae-c*, *quae* beside

sī quā, *aliqua*, Osc. paí *pae*. Another form of this class is probably Pruss. *stai* beside *sta* f. 'the, this' (Lith. *tà tó-jì*) *quai quoi* f. 'which', whence we have substantival forms by analogy, *mensai* 'meat' (Lith. *mẽsà*) *deiwutiskai* 'blessedness' among others (J. Schmidt has a different explanation, Kuhn's Zeitschr. XXVII 389 ff.).

§ 415. Forms with the particle *-u*, doubtless the same as appears in the loc. pl. *-s-u* (§ 356 p. 257). Idg. **so-u̯* in Skr. *sṓ* O.Pers. *hauw* Gr. *οὗ-τος*. Skr. *a-sāú* (for its *a-* see § 409 p. 327) and Avest. *hāu* are remarkable, being used for both masc. and fem.; conversely O.Pers. *hauw* is used for both genders; the obvious conclusion to draw is that in the first pair the Idg. fem. **sā-u̯* is used instead of **so-u̯*, and in the latter group **so-u̯* is used instead of **sā-u̯*, cp. O.Pers. fem. *iyam* = Skr. *iyám* used for the masc. However, the masc. *a-sāú hāu* along with Ved. masc. *sá* may be derived from an Idg. **sō* beside **so* (Bartholomae, Bezz. Beitr. IX 310, Kuhn's Zeitschr. XXIX 498, cp. also Wackernagel, E. Kuhn's Litteraturblatt, III 55, and Johansson in Bezz. Beitr. XVI 129), and O.Pers. *hauw* from an Idg. **sa-u̯* with the same grade of ablaut as is shown by the Idg. fem. **qa-i̯* (§ 414) (cp. Wackernagel, Das Dehnungsgesetz p. 65). Gr. *αὕ-τη* may be derived from either **sāu̯-* or **sau̯-* (I § 611 p. 461), and *οὗ-τος* might also be connected with Avest. *hāu* and derived from **sōu̯-*.

Avest. masc. *avāu* beside *aom* i. e. *avem* 'that yonder' is like *hāu*, see Bartholomae, Kuhn's Zeitschr. XXIX 498.

Remark. With the relation between **so* : **sō* compare these other pairs of pronouns: nom. **eĝ(h)o* : **eĝ(h)ō* 'I' § 439, loc. **te* : **tē* 'there' etc. § 424, acc. **me*, **tu̯e*, **su̯e* **se* : **mē*, **tu̯ē*, **sē* 'me, thee, himself' § 442, nom. dual **u̯e* : **u̯ē* 'we two' **i̯u* : **i̯ū* 'ye two' § 457, nom. **tu* : *tū* 'thou' § 440. The difference of quantity in these pairs of forms was of the same kind as that which is found in other final syllables and syllables which have some resemblance to finals; e. g. **u̯e* : *u̯ē* 'or' (Gr. **ϝε* in *ἠ-ὲ* Lat. *-ve* : Skr. *vā*), **pro* : **prō* (Gr. *πρό* Skr. *prá*: Gr. *πρω-πέρυσι* Skr. *prā-sáh-*), **nu* : *nū* (Skr. *nu* Gr. *νύ* : Skr. *nú* O.H.G. *nū*). On these forms we may now refer to Wackernagel, Das Dehnungsg. pp. 5 ff.

§ 416. The relation between Skr. nom. *vḗ-ṣ* and *ví-ṣ* 'avis' and like pairs (§ 195 p. 75) suggests that Lat. *eis īs*

and *eis-dem* (Bücheler-Windekilde, Grundr. p. 28), beside *i-s* = Goth. *i-s*, is to be derived from an original strong-grade nominative **ei̯-s*, which may also be the source of O.Ir. *ē* (cp. § 414 p. 335). But it is quite conceivable that *eis* is a contamination of **e-i̯* (§ 414) and *i-s*, cp. O.H.G. *jenē-r* p. 336.

Remark. It seems to me a very dubious supposition that *eis*, which occurs three times in *C.I.* no. 198, is each time a blunder (Danielsson, Stud. Gram. p. 23). It is preferable to regard *eisdem* as a contamination of *īdem* = **izdem*, and *isdem* (restored on the analogy of *is*). But this view is needless, if there was a form *eis īs*.

Nominative and Accusative Singular Neuter.

§ 417. The mark of these cases is *-d*, answering to *-m* in nominal *o*-stems (as **jugo-m* 'iugum'), and to a suffixless stem in the other classes of nouns (as **pe̯ku* 'pecu'); e. g. **to-d* 'that' **qo-d *qi-d* 'what'. Skr. *tá-d* Avest. *ta-þ* O.Pers. *ai-ta* = Avest. *aę-taþ*; Skr. *ci-d* Avest. *ci-þ* O.Pers. *ciy* 'any, at all'. Gr. *τὸ ποδ-από-ς* (II § 32 p. 56) Thess. *πόκκι* for **πόδ κι*; the particle **ϝοδ* in Gr. *ὅττι ὅππως* and the like was probably the neuter of **su̯o-* 'suus' (the Author, Gr. Gr.[2] pp. 134, 231) and not the abl. sing. like Skr. *mád* (§ 474), cp. Avest. *ma-þ* 'meum'; *τί τὶ* = Skr. *ci-d*. Lat. *is-tud quo-d qui-d*, Umbr. *este* 'istud' for **es-to(d)* (cp. § 274 Rem. p. 174) piĭ-i *pirs-i* 'quid, quodcunque', Osc. *po-d* 'quod' pí-d *pi-d* 'quid'. O.Ir. *ce ci* 'quid' in *ced cid* 'what (is)' for *ce ed ci ed*; whether *ed* 'it' is connected with Lat. *i-d*, is doubtful, see § 409 pp. 331 f. Goth. *hva*, *þa-t-a i-t-a* with *-a* for *-ō*, as is shewn by *hvarjatō-h* 'each' and other similar forms, O.H.G. *da-z e-z*, cp. the Remark. Pruss. *s-ta*, *ka*, O.C.Sl. *to*, *je* = Skr. *yá-d* and *čĭ-to* (*-to* is a particle), *ni-čĭ-že* 'nihil'; in Lith. **tà* = **to-d* was driven out of the field by the neut. pl. *taĩ* (§ 428), see J. Schmidt, Plur. pp. 228 f.; but the *d*-ending remained in adjectives like *gẽra*, to which it had spread before this happened (§ 227 p. 110).

Remark. Hitherto the final vowel of Goth. *þata* etc. has been explained as an affixed particle, like that in acc. masc. *þana* = Skr. *tá-m*. But Johansson (Bezz. Beitr. XVI 129, 161) sees in Goth. *-ta* a fuller form

of the suffix *-d* (ablaut **-dă^r* : **-d'*), and equates *þata* with Skr. *tadā́* Lith. *tadà*, *ita* with Skr. *idā́* and the like. He sees another grade (*-de*) of the same suffix in Gr. *ἰ-δέ τό-δε* Lat. *ide-m*. But he will not allow that Goth. *þana* is an acc. with *-m*; he makes it the same as *þana-* in *þana-máis* 'further, still', and derives it from **tonē*. This last derivation does not convince me in the slightest degree; for the form in question is masculine, and there is nothing in its use to suggest a derivation from any such adverb. The accepted explanation of *þan-a* has in my opinion no difficulties at all. O.H.G. *den*, with *e* instead of *a* taken from the other cases, may be the unextended form, which keeps the nasal like the preposition *in* = Gr. *ἐν* and the particle Goth. *an* = Gr. *ἄν* Lat. *an*. Johansson's explanation of *þata* is less objectionable in itself. But *þata* cannot be separated from *þana*; and unless *þana* is merely a re-formate moulded after *þata* when *þata* had come to be regarded as a simple uncompounded word — which there is nothing to shew — we must adhere to the old explanation of *þata*. O.H.G. *daz* is doubtless the unextended form, which kept the final dental, as it should do, before a vowel initial in the following word, just as *den* kept its *-n*.

Re-formations in the separate languages with the *-m* of noun-stems in *-o-*. Skr. *kí-m* (cp. Gaedicke, Acc. in Veda pp. 6, 16) Pali *taṃ* Avest. *ke-m yi-m aom*. Gr. *ταὐτό-ν* instead of *ταὐτό*. Lat. *ipsu-m* Umbr. *esom-e* 'in hoc'. Another is doubtless O.Ir. *(s)a n-*, neuter of the article and relative pronoun.

Genitive Singular.

§ 418. In the Masc. Neut. there are two endings, which passed very early into the noun-system: **-si̯o* and **-so*, see § 228 pp. 113 f., § 239 pp. 130 f.

**si̯o-*. Skr. *tá-sya* Avest. *aę-tahę*; Skr. *a-syá* Avest. *ahę aňhę* (*ňh* taken from the fem. *aňhā̊* = Skr. *asyā́s*, cp. § 420); Gāthic *ahyā aẋyā* (I § 558. 3 p. 415); O.Pers. *ava-hyā* Avest. *avaňhę* (*ňh* as in *aňhę*); Skr. *amúšya*. Armen. *oroy* from *or* 'which'; but cp. § 239 p. 131. Gr. Hom. *το-ῖο* Att. *τοῦ* = **to-si̯o*; Hom. *τέο* Att. *τοῦ* = Avest. *cahyā*, common ground-form **qe-si̯o*. O.Ir. *ai ae*, unaccented *ā a* (with "aspiration" of the following initial) 'eius', I would suggest for **e-si̯o*, cp. Skr. *a-syá* Goth. *i-s* O.H.G. *e-s*.[1]) Lastly **-si̯o* is probably the suffix of

1) To avoid separating things which are really closely connected, I may add here a few general remarks upon Irish possessives of the third person. These will be based upon Stokes's Celtic Declension

Pruss. *s-te-ssei s-tei-sei s-te-sse s-tei-se s-tei-si* (*stei-* has been taken from the gen. pl. *stei-son*) 'of this, of the', *aine-ssa aina-ssei* 'of one, of a', although the uncertainty of the spelling makes it impossible to draw a certain conclusion (cp. Leskien, Decl. 113 f.).

**-so.* Goth. *þi-s* O.H.G. *de-s* = **té-so*, A.S. *đae-s* (beside *đe-s*) = **tó-so* (cp. Gr. τέο beside ποῦ); Goth. *i-s* O.H.G. neut. *e-s.* Compare § 239 p. 131. O.C.Sl. *če-so* = Goth. *hvi-s* O.H.G. *hwe-s*, *čĭ-so* (beside *čĭ-to* 'quid'). There is no need that I can see to assume that Greek had **-so* (as well as **-si̯o*), Johansson notwithstanding (De der. verb. contr., p. 215).

In the separate languages there were frequent levellings between pronominal forms of the gen. sing. and the gen. pl.: O.Ir. *ai* 'eorum' = **esi̯ŏm* following *ai* 'eius' = **esi̯o*; Lat. *cuium* following *cuius*, see footnote on preceding page; Pruss. *steisei* instead of *stessei* following *steison*, see above; Goth. *þizē* instead of **þáizē* (cp. A.S. *đāra* O.Icel. *þeira*) following *þis*; Avest. *aẹtaṇhąm* instead of *aẹtaẹšąm* following *aẹtahẹ*, § 429. This suggests a conjecture that **-so* in Goth.

(pp. 104 f.), and upon communications which I have received from Thurneysen. The above named forms *ai ae ā a* can be used for the feminine ('αὐτῆς'), but then *ā a* do not cause aspiration, and so they are doubtless connected with Skr. *asyā́s*. Further, *ai ae* are the accented gen. pl. (and dual) 'eorum, earum' the unaccented being *ā n-*, *a n-*. In explaining these forms we have to consider (1) the sing. masc. fem. Mid.Cymr. Corn. *y* Bret. *e* (pl. Mid.Cymr. *eu* Bret. *ho* = pr. Brit. **ou*? § 438); (2) the Irish substantival word for 'that which belongs to him, or them' (all genders): *ai ae*, acc. pl. masc. *aii*, dat. pl. *aiib*, with which is doubtless connected Mid.Cymr. *eidaw* 'that which is his', *eidi* 'that poss. which is hers', *eidunt* 'that which is theirs'; also used along with the pronoun: *ā-aii* 'suos' Cymr. *y eidaw* 'his own' (masc.). A conjecture may be offered that **esi̯o* and **esi̯ās*, in proethnic insular Keltic, when in pre-tonic position became **asi̯o *asi̯ās* (cp. Ir. *as-* beside *és-* 'ex' I § 66 p. 55), and the *a-* passed from these to the accented forms. The gen. pl. which grew out of these forms, **asi̯ŏm* = O.Ir. *ai ae*, *ā n-* *a n-*, may be compared with Lat. *cuium* (Charisius) following *cuius*, which took the place of *quōrum* or *quium* (Cato) (compare Hom. ἡμείων beside ἑμείο § 454), but the subst. *ai ae* is naturally compared with Lat. *cuiu-s* 'belonging to whom' which comes from the gen. *cuius* (§ 419). The substantival acc. pl. *aii* shows that this stem had *i*-flexion.

þi-s O.C.Sl. *če-so* etc. has been transformed from **-si̯o* on the analogy of the gen. pl. **-sŏm* (§ 429). Similarly in the feminine there is **-sās* (Goth. *þizōs*) for **-si̯ās* (Skr. *tásyās*).

§ **419.** Some of the Armenian pronouns have *r* as the genitive suffix, which is certainly to be connected with the genitive *r-* in the personal pronouns *me-r* 'nostri' *je-r* 'vestri' *iu-r* 'sui' (§ 455): *oir* from *o* 'who'; *nor-in* from *no-in* 'the same', and others. Compare further O.Icel. *vār* O.H.G. *unsēr* § 455.

The much-discussed Italic forms[1]) contain a locative in *-e-i̯*; and this formation may be suggested as an explanation of the gen. sing. of noun stems in *o* (§ 239 pp. 131 f.). The loc. in *-e-i̯* was used in pr. Ital. for loc., dat., or gen., as the form **me-i̯ *mo-i̯* in the personal pronoun had been used right on from the parent language (§ 447); we may suggest that **te-i̯* when used for the genitive had at first only the possessive meaning, and did not come till later to be quite coextensive with this case. Compare Thess. loc. *τοῖ* and *χοόνοι* used as gen. A desire to mark off the genitive from the other cases led to different results in different dialects of Italic. In Latin an association with the gen. in *-us* (*homin-us*) produced such forms as *istī-us*, *eiius eius* i. e. *eei+us* (cp. loc. dat. *eei eī*); but the gen. suffix *-s* was added in Umbr. *erer irer* Osc. eíseís *eizeis* 'eius' and the like (cp. subst. Umbr. *popler* Osc. sakarakleís), the latter of which are exactly parallel to O.Lat. gen. *mī-s tī-s* instead of *mī tī* (§ 447). The re-formates *istīus eius* were used for the feminine as well, but *istae utrae* and like forms are also found, as in Umbr. *erar* 'eius'. The older *-ei* (**istei*) survived in composition beside *-ei-us* (*istīus*), as *istīmodī* (cp. *quoi-quoi-modī*, below); but *neutrī*, in *neutrī generis* etc., has doubtless borrowed *-ī* from the nouns (similarly Lith. masc. *tõ* fem. *tõs*).

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1) In addition to the references given by Stolz, Lat. Gr.[2] 348, see Merguet, Die Entwickel. der lat. Formenb. 83 ff., 92 f.; Danielsson, Studia gramm. 1879 pp. 1 sqq.; Bersu, Die Gutturalen p. 136; W. Meyer, Zeitschr. für rom. Philol. X 174; Henry, Précis de grammaire comp., p. 248; Luchs, Studemund's Stud., I 316 ff.

The genitives *quoius hoius*, *cuius huius* must be discussed in connexion with *quoiei quoi hoi-ce*, *cui hui-c* and Osc. *pieis--um* 'cuiuspiam' *piei* 'cui', not forgetting Osc. *poizad* abl. 'qua' púllad adv. 'qua' Umbr. *pora* abl. 'qua'. As far back as proethnic Italic a fossil case of the stem **qo-*, say **kṵō* or **kṵoi̯*, was used instead of the inflected pronoun as an interrogative or relative particle, the case which it was intended to represent being made clear by an inflected demonstrative pronoun which was used with it; cp. Lith. dial. *tùs cĕcorius*, *kùr iszválnino jó dùkteri̯* 'the prince, where he has freed his daughter' = 'whose daughter he has freed' (the Author, Lit. Volksl. p. 305).[1]) Thus Lat. *quoiei* = *qō* + *eei*, to which was later added *quoius* as a distinctly marked genitive (though *quoi-quoi-modī cui-cui-modī* remain unchanged), Osc. *poizad* = *pō* + *eizād* (*eizo-* 'is'), púllad = *pō* + *ollād* (cp. Lat. *olle*), Umbr. *pora* doubtless = *pō* + *orā* (*orer* 'illius') rather than *pō* + *ērā* (*erer* 'eius' = Osc. *eizeis*).[2]) Osc. *piei* (gen. *pieis-* in the comp. *pieis-um* 'cuiuspiam') is doubtless derived from a combination of the adverb **pī* = Lat. *quī* from the stem **qi-* (§ 421) with *e(i̯)ei̯*, although it might possibly have come into existence by attraction of *pi-* to the *o*-class. On the analogy of *quoi quoius* the Lat. *hoi-ce hoi-us* were made, like the nom. pl. *hēs* following *quēs* (§ 427); the similarity once existing between these stems in the nom. sing. (*quī* and *hī-c(e)*, § 414 p. 336) may have helped in this result.

Remark. The Lat. adj. *quoiu-s cuiu-s* 'belonging to whom', to judge from its meaning, seems to have arisen from the possessive genitive *quoius*, which looked like an adjective; if so, it has an exact parallel in Avest. *na-* 'noster', formed from the genitive *nō* = Skr. *nas*; see the end of § 454.

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1) The same idiom is found in Modern Greek, as *αὐτὸς εἶναι ὁ ἄνδρας ποῦ τὸν εἶδα*, beside *ποῦ εἶδα*, 'that is the man whom I saw'; in Keltic; and in High German.

2) Osc. púiiu, in Zvetaieff, Inscr. It. inf. no. 103, seems to be one of this group of forms (I would derive it from **pō* + *ei̯o-*); but the meaning of the passage in which it occurs is obscure.

Old Irish has also *-ī as in nouns, *ind athar* 'of a father' for **sen-tī*, like Lat. *istī-modī* Gr. Thess. *τοῖ*.

Lithuanian. With noun flexion, *tõ*, *jõ* etc. Old Church Slavonic *to-go je-go*, etc., a re-formation which has not yet been satisfactorily explained, see Leskien, Decl. 109 ff.

§ **420**. Feminines belonging to *o*-stems had in the parent language the masculine stem with the ending **-si̯ās* for the genitive singular. Ar. *-asyās*: Skr. *tásyās asyás*, Avest. *aę-taṅhå aṅhå*. O.Pers. *ahyāyā* instead of **ahyā*, following *taumāyā* (§ 229 p. 114), just as Pali *assa* = Skr. *asyás* was extended to *assāya* on the analogy of *kaññāya*; ending exactly as a noun, Avest. *aętayå* (following *haęnayå*) beside *aętaṅhå*. Skr. *amú-ṣyās* like *amú-ṣya*. O.Ir. *ai ae* for **e-si̯ās*, see p. 339 footnote. Pruss. *s-tessias stessies stesses steises* (*ei* on the analogy of masc. *steisei*, § 418 p. 340). Germanic **-si̯ās* and **-sās*. A.S. *dǣre* = pr. Germ. **þai̯zi̯ōz*, Goth. *þizōs* and *blindáizōs* (§ 406 p. 321), O.H.G. *dera*, O.Icel. *þeirar* = pr. Germ. **þai̯zōz*. This *ai̯* has come from the gen. pl., where it spread from the masc. to the fem. (§ 429). But the loss of *i̯* in Goth. *þizōs* etc. is to be explained like the same loss in the masc., see § 418 p. 340. As regards *-s-* becoming *-z-*, see Kluge, Paul's Grundr. I 347.

This Idg. feminine formation in **-si̯ās* was produced under the influence of the masc. in **-si̯o*. Either there was once a fem. **tās* like **ek̑u̯ās*, which was transformed to **tesi̯ās* by association with **tesi̯o*; or else **tesi̯o* at first served for all genders, and afterwards the feminine was distinguished by the transformation **tesi̯ās*. From the gen. in **-si̯ās*, *si̯* (*s*) spread to the dative and locative in the proethnic period; see § 425.

O.C.Sl. *toję* contains the *-ę* of *dušę*, standing for **-ans* or **-ons*. See § 229 pp. 117 f. Since the dat. loc. *toji* borrowed the sounds *-oj-* from the instr. *tojǫ* = Skr. *táyā* (§ 425), *toję* itself may have followed the same analogy.

Endings the same as those of nouns. Greek *τῆς*. Latin *illae* beside *illīus* etc., Umbr. *erar* 'eius'. Old Irish

inna for **sen-tās*, *cacha cecha*, *nacha*, cp. *mnā* § 229 p. 114. Lith. *tõs*.

Instrumental Singular.

§ **421.** A suffix proper to pronouns was *-na*, the same (we may suggest) as the ending of certain adverbs; for instance, Skr. *caná* Goth. *-hun* O.H.G. *-gin* 'any', Skr. *hiná* 'then', Lat. *pōne superne*, Goth. *þan* 'then' Lith. *tẽn* 'there'. Examples: Avest. *ka-na* O.Pers. *tya-nā aniya-nā*, Skr. *kḗ-na tḗ-na ē-na*; the latter, like Skr. *sanē-mi* O.C.Sl. *tě-mĭ* (see below), have doubtless the same diphthong which is seen in the nom. sing. Lat. *qo-i quī* etc. (see § 422 Rem.), and they also remind one of Skr. *ē-vá* Ved. *ē-vá ē-vā́* 'so' Goth. *hvái-va* 'how'. With Skr. *kḗna*: Avest. *kana* cp. Lith. gen. *kënõ* : *kenõ* (*kanõ*) § 451 pp. 391 f. *-ēna* was borrowed by the nouns, whence *vṛ́kēṇa* etc., see § 275 p. 177. Gr. *ἴ-να*, cp. § 409 p. 331. A lost form **ci-na* (nom. *ci-š*) seems to have suggested the making of the Avestic acc. *cinem*.

Forms from *o*-stems ending in **-oi̯-mi*. Skr. *sanē-mi* 'from of yore'. A.S. *đǣ-m* O.Icel. *þei-m* beside subst. A.S. *miolcum* (as in the pl., Goth. *þái-m* beside subst. *vulfa-m*). O.C.Sl. *tě-mĭ ji-mĭ*. Compare the Pruss. *sen maim* 'cum meo' = 'mecum' (see §§ 449, 452), which is doubtless not to be derived from Idg. **moi̯-mi* (cp. Avest. *ma-* Gr. *ἐμό-* 'meus'), but belongs to the stem *maia-*, and has undergone a contraction like the gen. *maisei* (beside *stessei steisei ainassei*), and the nom. *mais* = O.C.Sl. *mojĭ*; however, I leave it undecided whether **maiai-m(i)* became *maim* in the natural course of things, or by association with *maiā-smu maia-n* became first **maia-m(i)*, and then *maim* (cp. *twaismu* beside *twaiāsmu*). Compare § 282 pp. 187 f. Armenian: with *-v* for **-bhi oro-v*, from *or* 'which', following the subst., *gailo-v*; similarly *i-v* 'with or through what?' from *i* 'what?' like subst. *śrti-v*, see § 281 p. 186.

There also seem to have been in the parent language, and to have come down from it, an instrumental series from *o-*

and *i*-stems made noun-fashion, ending in *-ō -ē* and *-ī*. Avest. *tā yā ana*. Gr. *πῶ* (*οὔ-πω*), Lac. *πή-ποκα*. Lat. *quō--modo*, *quō* 'whither', Umbr. *sei-podruh-pei* 'utroque'; Lat. *quī* 'how' from *qui-s*. O.Ir. *cāch* (gen. *cāich*) O.Cymr. *pau-p* 'quivis, each' no doubt = **qō-qos*, properly 'where who, how who, somewhere or somehow someone' as Thurneysen conjectures; *neuch neoch* for **ne-qō*, *cossind* 'with that' for **con sen-tu*. A.S. *hwō* 'how' O.H.G. *diu*, *hiu-tu* 'to-day' (§ 409 p. 330), Goth. *hvē* 'with which' *þē* 'by so much': *hī* (beside Goth. *hi--mma*) in O.H.G. *hī-naht* 'this night'. Lith. *tū̃* 'with that, at once' *jū̃* 'by that, by so much': the suffix *-mi* was added to this series, and produced *tů-mì ků-mì*, just as in nouns *-u-mi* (*vilkumì*) was produced in some dialects, see § 275 p. 178; Pruss. *s-tu ku*. Mod.Slov. *či* 'if' Czech *či* 'whether' = Lat. *quī*, and with *-mĭ* added O.C.Sl. *či-mĭ* used as instr. to *čĭ-to*. According to this analogy, the particle **ī*, Ved. *ī* (also seen in *ī-dṛś-* 'such as this') Gr. *-ῑ́* in *οὑτοσ-ῑ́* Umbr. *pors-ei* nom. pl. 'qui', may be the instr. to Lat. *i-s*; if so, the nasal in Ved. *īm* Gr. *οὑτοσ-ῖν* is the particle *-m*.

§ **422.** *ā*-stems had *-aiā*. Skr. *táyā* Avest. *aẹ-taya*, Skr. *ayā́* Avest. *ayā āya*. O.C.Sl. *toją* (with the particle *-m*), compare O.Lith. *taja*, in modern dialects *taĩ* (J. Schmidt, Kuhn's Zeitschr. XXVII 386 f.); for a different explanation of *taĩ* see Brückner, Arch. slav. Phil. VI 272.

In Aryan, this ending spread into the noun-system: Skr. *áśvayā* instead of *áśvā*, Avest. *haẹnaya* instead of *haẹna*: similarly O.C.Sl. *rąkoją* instead of *rąką*. In Lithuanian we find, *vice versa*, the pronoun assimilated to the noun, *tà* following *rankà*; and similarly Gr. *ἡ* Dor. *ταντᾶ* and doubtless Lat. *hā-c* etc. See § 276 pp. 178 ff. It is uncertain whether Ved. *tyā́* instead of *tyáyā* and Avest. *yā kā* beside *aẹtaya* have followed the noun type, or whether *tyā́* and *yā* are due to syllabic dissimilation, and *kā* to the analogy of *yā* (compare similar changes in § 247 p. 147, § 307 Rem. p. 205).

Skr. *amúyā* beside *amúṣyās* follows the lead of *-ayā*.

Remark. Schmidt (Kuhn's Zeitschr. XXVII 386) analyses Skr. *ayā́* thus — *ay-ā́*, and derives it from the stem *i-*; he then assumes that *ayā́* : *asyā́s* first suggested the formation of *táyā*. This commends itself to me as little as his view (*ibid.*, p. 292) that *ē-na* also comes from *i-*, and that it was the relation of *ēna* : *asyá* that produced *tḗna* beside *tásya*. There is a much safer way of regarding these. Schmidt himself tells us (Kuhn's Zeitschr. XXV 5 f.), and I believe it to be true, that *-i̯-* in certain plural forms (Goth. *þá-i-m* O.C.Sl. *tě-mi* Skr. *tḗ-bhiš*, Gr. *το-ῖ-σι* O.C.Sl. *tě-chŭ* Skr. *tḗ-šu*) is the same as *-i̯* in the nom. plural (Gr. *το-ί* Skr. *tḗ* etc.); and further, we have concluded that the *i*-diphthongs in oblique cases of the dual, as O.C.Sl. *tě-ma* Skr. *táy-ōš*, contain the same *-i̯* as the nom. acc. dual neuter and feminine (Idg. **to-i̯* and **ta-i̯*); see § 297 pp. 201 f., § 311 pp. 209 f. If these assumptions are correct, we can hardly go wrong in connecting the diphthong of Skr. *ē-na tḗ-na* and *sanē-mi* O.C.Sl. *tě-mĭ* with that in the nom. sing. masc., e. g. Skr. *ay(-ám)* Lat. *qo-i quī* Osc. *poi* etc., and similarly the *i̯* of Skr. *ayā́ táyā* O.C.Sl. *toją* with that of the nom. sing. fem., as Avest. *þwōi* Lat. *quae* (§ 414 p. 336). It is true that Skr. *ayā́* might be derived from the stem **ei̯ā-* (Lat. *eā-* Goth. *ijō-*); but there is no reason to separate it from *táyā* etc.

Ablative, Dative, and Locative Singular.

§ **423.** In the masc.-neut., the stem is often extended by *-sm-*; the same particle which appears, without any inflexional ending, in the acc. Avest. *ahma* Lesb. *ἄμμε* (§§ 436, 443).

Skr. *tásmād tásmāi tásmin*, *asmā́d asmāí asmín*, Avest. *aę-tahmāþ aę-tahmāi aę-tahmi*, *cahmāi* with **qe-* like O.C.Sl. loc. *če-mĭ*. Skr. re-formates, *amúšmād amúšmāi amúšmin*. Armen. abl. *y umē* dat. loc. *um* from *o* 'who', *y ormē*, *orum* from *or* 'which'; *-um-* for *-osm-* I § 561 p. 417. Gr. Gortyn. loc. *ὅ-τιμι* i. e. doubtless *-τῖμι* for **τι-σμι*. (On the dative *τέμμαι* 'cui', assumed by some, see Solmsen Kuhn's Zeitschr. XXIX 79). Umbr. e-smi-k 'ei' *esmei esme* 'huic', pu-sme 'cui'. Goth. *þa-mma hwa-mma i-mma*. Pruss. dat. *s-te-smu* (*steismu*, cp. gen. *steisei* § 418) *ka-smu*, *antersmu* (stem *antera-*), *schi-smu* (*schi-s* 'this').

In Germanic and Balto-Slavonic there is another series which has *-m-* instead of *-sm-*. O.H.G. *demu hwemu*. Lith. dat. *támui tám* loc. *tamim-pi tami tamè tam̃*, O.C.Sl. dat. *tomu* loc. *tomĭ*; Lith. *szimè* beside *sziamè* from *szì-s*. These forms

have certainly dropped *s* on the analogy of the cases whose suffix began with *m*: cp. O.H.G. pl. *dē-m*, sing. pl. A.S. *đǣ-m* O.Icel. *þei-m*, Lith. pl. *tė̃-ms* dual *tė̃m-dvėm tė̃m-dvėm* O.C.Sl. sing. *tě-mĭ* pl. *tě-mŭ tě-mi* dual *tě-ma*. For a different explanation of O.H.G. *-m-*, see Kluge, Paul's Grundr. I 347.

As regards the case suffixes, that of the locative was a special pronominal ending. This case had the endings **-smin* and **-smi*, cp. Gr. *ἄμμιν ὔμμιν* and *ἄμμι ὔμμι* § 448. **-smin*: Skr. *tásmin*, Lith. *tamin* in *tamim-pi*, although it is true that *-mpi* may have come from the gen. pl., in which case we must analyse the word *tami-mpi* (see Brückner, Arch. Slav. Phil., III 279 f.; Osthoff, Morph. Unt. II 9).[1]) **-smi* in Avest. *-tahmi* Gr. *ὅ-τῑμι*. Lith. *tami* O.C.Sl. *tomĭ* may be explained as having either **-(s)min* or **-(s)mi*; if the former, Lith. *tami* should be written *tamį*. O.Lith. *jamije* like *diewije*. O.Lith. Mod.Lith. *tamè*, whence *tam̃*, has the same ending as loc. *vilkè*; a conjecture as to the origin of *tamè* is given in § 424, pp. 349 f.

The ablative and dative, on the other hand, originally had the same suffix as the nouns. Skr. *tásmād tásmāi* Avest. *-tahmāp -tahmāi* like *vŕkād vehrkāp vehrkāi*. Armen. *y umē* like *y akanē*, cp. § 244 p. 142; what may have been the ending of *um* we can hardly now hope to ascertain. Umbr. esmi-k *esmei esme* like Tefri *Tefrei* Tefre 'Tefro deo', cp. § 246 pp. 145 f.; in pusme it is a question whether the particle -e *-ei* (cp. puř-e 'quid') has not become attached to the ending. Goth. *hvamma*; here *-a*, to judge from *hvammē-h* 'to each', came first from **-ē*, but it may represent the abl. **-ēd* or the dat. **-ē(i)*; O.H.G. *hvemu* seems to be an abl. in **-ōd*, cp. § 241 pp. 137 f., § 246 p. 146.

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1) The form *tami-pi* does not prevent our explaining *tamimpi* as *tamin*+*pi*. Both forms, *tami* and **tamin*, may originally have existed side by side. Or **tamin* may have become *tami*, and after the uncompounded word had thus changed, *-pi* may have been added again. This can be paralleled by *tam-pi*, which does not come from *tame-pi*, but after *tamè* had become *tam̃*, *-pi* was added again to the new word.

Lith. *támui* (shortened to *tám*) O.C.Sl. *tomu* like *vilkui vlŭku*; Pruss. *stesmu* like *waldniku* 'regi'.

§ **424.** Side by side with the forms cited in the last section is a series without *-sm-*.

Ablative. Skr. *ád tád yád* Avest. *āþ*, all adverbs. Gr. *ὦ ὅπω* 'unde'. Lat. *istō quō*, Osc. eísúd 'eo'. Lith. *tō*. The abl. **tōd* 'thence, then' is said, doubtless correctly, to be the ending of the imperative Skr. *bhára-tād* Gr. *φερέ-τω* Lat. *fer-tō* and similar forms (Gaedicke, Acc. im Veda 225; Thurneysen, Kuhn's Zeitschr. XXVII 179 f.). — An Italic re-formate is Lat. **quīd* from *qui-s* in *ab aliquī* etc. (Bücheler-Windekilde, Grundr. 121 f.), cp. *marī(d)* § 243 p. 139.

Dative. Gr. *τῷ*. Lat. *istō nullō* beside *istī* etc. A late re-formate is Lith. dialectic *mirusiou-jui* = High Lith. *mirusiám-jām*, part. pret. of *miř-ti* 'to die' (Geitler, Beitr. lit. Dialektologie, 27).

Locative. Gr. Att. *ποῖ* Dor. *πεῖ*, *ἐ-κεῖ*. Lat. *hei-c hī-c*, Osc. eíseí 'in eo' alttreí 'in altero'. Goth. *þei* O.Icel. *þī* = Gr. *τεῖ-δε*, O.Icel. *hvī* = Gr. *πεῖ*; see Bechtel, Zeitschr. deutsch. Alt. XXIX 366 f. A loc. from the stem *o-* may be contained in Gr. *εἰ εἶ-τα* (beside *ἢ* instr. in Heraclean etc., see the Author, Gr. Gr.[2] p. 225) and in Skr. *ē-ṣa- ē-ta-* Osc. *ei-zo-*, see § 409 p. 329.

Certain forms used for the dative are really locatives of the same kind: Osc. *altrei* 'alteri' *piei* 'cui', Lat. *istei istī*, *eei ei* (also spelt *eiei*, like dat. abl. pl. *eieis* beside *eeis eis*), *quoiei quoi cui*, the latter for *quō* (or **quoi*) + *eei* (see § 419 p. 342); Lat. *hoi-ce hui-c* is a re-formate following *quoi cui*. These same forms, as we assumed in § 419, once had the meaning of a genitive as well (cp. Idg. **mo-i̯* loc. dat. gen. § 447), and, as genitives, were extended in Latin by *-us*, whilst in Umbro-Samnitic *-ei̯* became *-eis* by analogical transformation. The use of *istī* etc. for the feminine was doubtless due to the likeness between the ending *-ei -ī* and that of *mī mihī tibī sibī*, used for all genders, and of the dative of *i*-stems; the endings of both sets were considered to have the same character.

A comparison of the forms cited in this section with those containing *-sm-* (§ 423) makes it probable that it was only the locative which had two original formations. In the locative there will have been parallel endings *-smin -smi* (Skr. *tásmin* Avest. *-tahmi*) and *-i̯* (Gr. *πο-ῖ*); later on, but before the end of the proethnic period, *-sm-* spread to the ablative and dative, which hitherto had had the same endings as nouns. Ablative adverbs like Skr. *tád* are older than this change; and being adverbs they were not affected by intrusion of *-sm-*. But such forms as Lat. *istō(d)* and Greek *τῷ* may or may not be original; it is possible that they were produced by some tendency of a later date which brought them again under the influence of the noun system.

This *-sm-* is usually identified (and doubtless rightly so) with the particle Skr. *sma*, which follows pronouns by way of emphasising them: e. g. *tásya sma*. Now it will be seen anon (§ 443. 2) that Gr. Lesb. *ἄμμε* Avest. *ahma* probably consist of **n̥s + sme*, i. e. the ground-form of Goth. *uns* with a particle **sme* added; and that from this combination were produced the forms for which it is usual to assume the stem **n̥sme- *n̥smo-* (Gr. *ἀμμο-* Skr. *asma-*). Thus this particle must have originally been added to a fully formed case of the pronouns which distinguish genders as well as to those already cited; this case will be the locative. And there is nothing to bar our starting from **te + sme*, and calling the first of these a locative. Compare Lith. *tè* 'there!' O.C.Sl. *te* 'and' beside **te-i̯* (**to-i̯*); Lat. *ce* in *ce-do* Osc. *ce* in *ce-bnust* (*-bnust* 'venerit') Lith. *szè* 'hence' (but cp. § 409 p. 330) beside Gr. *ἐ-κεῖ κεῖ-νο-ς*; Lith. *nè* Goth. *ni* Skr. *ná* 'not' beside **ne-i̯* in Lith. *neĩ nĕ-ka-s* Avest. *naę-ciš* Lat. *nei nī*; Lith. *be-*, a particle which denotes duration of an action, beside *beĩ* 'and'; O.C.Sl. *kŭde* beside *kŭdĕ* 'where'; and the like.[1]) **te*

1) Beside **te*, **k̂e*, **ne* the parent language had also **tē*, **k̂ē*, **nē* (Gr. *τῇ* 'there!' Dor. *τῇ-νο-ς* 'iste, ille'; Dor. *κῇ-νο-ς* 'ille'; Skr. *nā́* O.Ir. *nī*); the variation in quantity has parallels, **mē : me* 'me' etc. See on this matter see § 415 Rem. p. 337.

and **te-i̯* were parallel locatives like Gr. *δό-μεν* and *ποιμέν-ι*, see §§ 256 ff. pp. 156 ff. The ending of **tesme* meets us still in Baltic, in Lith. *tamè* (*geramè*), which has taken the place of **tesme*, because, by association with case-suffixes whose first sound was *m-*, *s* was dropped, and *-e-* gave place to *-a-*; cp. Pruss. *ste-smu* as contrasted with Lith. *támui*, § 423 p. 346. On the analogy of *támui* : *tamè* the form *vilkè*, as I believe, was produced beside *vilkui*, and the same principle acting in the opposite way produced O.Lith. *jamije* on the analogy of *diewije*; cp. § 263 p. 166. Idg. had **tesmi(n)* = Skr. *tásmin* etc. beside **tesme*, as it had **n̥ssmi(n)* = Lesb. *ἄμμιν ἄμμι* beside **n̥ssme*. Perhaps there were originally two variants **sm-i* and **sm-e*, both extensions of **sem-*, which would make it unnecessary to assume that **tesmi(n)* was formed from **tesme*.

Remark. The above comparisons are based on the belief that those scholars who hold that Lith. *tamè* and *vilkè* come from **tamen* and **vilken* have not proved their case. In such forms as *geramen-je -jė* (Arch. slav. Phil. IV 592, Kuhn's Zeitschr. XXVII 385, Bezz. Beitr. X 312, and elsewhere), which are made the chief ground for assuming *-en*, it is strange above all things that the second part has not the pronominal form, as would have been expected (*-jame -jam*), but a noun ending, like *jamije amszinameje* etc. (Bezz., Zur Gesch. lit. Spr. 154, 168). Hence Leskien suggests that an earlier **geramejem(e)* was shortened to **geramem*, and to this was added *-je*, which was regarded as the locative ending in the nouns; when *-je* was added *-m* became *n*. No argument can be based upon the spelling of these words with *-jė* instead of *-je*; it might be a re-formation following noun-locatives in *-é*. Nor is the alleged *-en* proved by East Lith. forms in *-i*, as *miszkì* 'in the wood'. It is *possible* phonetically to derive *-i* from *-en*, but there is no need for this; rather the reverse, since there has hitherto been found no such form as an E.Lith. *-im-p(i)* for *-em-p(i)* *-en-p(i)*; no **dëvim-p(i)*, but only *dëvë-p(i)*. See Leskien, Ber. sächs. Ges. Wiss., 1884 pp. 96 f. Besides the explanation suggested by Leskien, that *miskì* comes from *miszkë*, there is another which should be considered — that *miszkì* followed the analogy of *tami* (with Idg. **-smi*), as *miszkè* that of *tamè*.

But suppose the supporters of the theory here criticised were really to make out a decent case for their **tamen* **geramen* and **vilken*,[1]) there would be little to change in the general principle. I would all the same

1) Is Pruss. *schisman*, Ench. 89, anything more than a piece of carelessness?

derive Lith. *tamę̃* (as these scholars write it) from Lith. **tesme*, and explain *-n* as the same postposition which makes the difference between Lith. *tamim-pi* Skr. *tásmin* and Gr. *ὅ-τῖμι*, and which is doubtless contained in Lith. *tẽ-n tę̃*, *szẽn szę̃* (extended to *tẽnai tẽnais* etc.) beside *tè szè* (= Lett. *te sche*).

§ **425.** In *ā*-stems we find sometimes complete agreement with nouns, sometimes the genitive *-si̯-* or *-s-* before the case ending (§ 420). We begin with the latter kind.

1. The Ablative and Genitive had the same form from the Idg. period onwards, e. g. Skr. gen. abl. *tásyās*, see § 420. Re-formations: Avest. *aṅhāp avaṅhāp yeṅhāđ-a* (beside gen. *aṅhå* etc.), like *barentyāp haęnayāp*, see § 242 p. 138.

Dative. Skr. *kásyāi asyāí* Avest. *kahyāi aṅhāi axyāi*, cp. Ved. *suvapatyāí* § 247 p. 147. Goth. *þizái izái* like *gibái*, but O.H.G. *deru dero iru iro* following *gebu gebo* with instr. ending, see § 276 pp. 178 f. Pruss. *stessiei stessei* and (with *-ei-* from the gen. pl. *steison*) *steisiei steisei*, cp. gen. *steises* § 420 p. 343, O.Icel. dat. *þeiri* beside gen. *þeirar*.

Locative. Skr. *kásyām asyám*, cp. *áśvāyām*; Avest. *kaṅhę aṅhę* with *-ę* = pr. Ar. *-i̯ā* (I § 125 p. 115) and *ṅh* from the gen.-abl. (*kaṅhå*), cp. Avest. *haęnaya* O.Pers. *arbirāyā* § 264 pp. 166 f. These pronoun cases were influenced by such forms as Skr. *bṛhatyám* Avest. *barentya* : *kásyām kaṅhę* : *kásyās kaṅhā* and *kásyāi kahyāi* = *bṛhatyám barentya* : *bṛhatyás barentyå* and *bṛhatyāí barentyāi*. Goth. *þizái* like *gibái*.

Sanskrit. Re-formates: *amúṣyās amúṣyāi amúṣyām*.

2. Forms without *-si̯-* or *-s-*.

Ablative like the genitive, Gr. *τῆς* etc. In Italic, a re-formation in *-ād*: Lat. *istā(d) hā-c*, Umbr. era-k 'ea' Osc. ekad 'hac' *eiza-c* eísa-k 'ea', like Lat. *equā(d)* § 243 p. 139.

Dative. Gr. *τῇ* Dor. *τᾷ* like *χώρᾳ*. Lat. *istae illae* (beside *istī illī*) like *equae*; Umbr. *-e* Osc. -aí are not found. O.Ir. *-ind* for **sen-ti* like *tuaith*. Lith. *taĩ* like *raṅkai*; Slav. *toji* beside *smiji rącě* has taken *-oj-* from the instr. *tojǫ*,

just as gen. *toję* is probably **ty* transformed in the same way (§ 420 p. 343).

Locative: always ends in *-āi̯* like the dative. Gr. Boeot. *ταε̃ τῆ*, Arcad. etc. *ταῖ* like Boeot. *Πλαύχαε*, see § 247 pp. 146 ff., § 264 p. 167. Osc. e]ísaí 'in ea' like víaí 'in via'. O.Ir. *issind* f. 'in the, that' = **in sen-ti*, like *tuaith*. Lith. *toj-è* like *rañkoj-e*, see § 264 pp. 167 f.; O.C.Sl. *toji* like dat. *toji*, see above. —

If the fem. gen.-abl. in *-si̯ās* was really, as our view assumes, produced by association with the masc.-neut. gen. in *-si̯o*, then *-si̯-* *-s-* spread from the gen.-abl. to the dat. and loc.: beside **tesi̯ās* was formed **tesi̯āi̯* following **ek̑u̯āi̯* : **ek̑u̯ās* (§ 420 p. 343). In a similar way were made Lith. *mánei* (*mán*), Pruss. *mennei*, O.C.Sl. *mĭně* in connexion with the gen. Lith. *manè* (*manę̃s*), O.C.Sl. *mene* (§ 445).

Cases of the Dual.

§ **426.** The Case-Suffixes peculiar to the Dual were originally, and always continued to be, the same in Pronouns as in Nouns.

Nom. Acc. In Greek the fem. *ταί* was turned into a plural (§ 286 p. 194), and in its stead was used the masc. *τώ*; e. g. *τὼ στήλᾱ*, cp. Gr. *δύω* Lat. *duo* Lith. dial. *dù* used for masc. and fem. alike.

Dat. Abl. Instr. On the difference of stem in masc. Lith. *tḗ-m(-dvëm)* *tẽ-m(-dvëm)* : *vilká-m vilka-m̃* and O.C.Sl. *tě-mà* : *vlŭko-ma igo-ma*, see § 297 pp. 201 f.; on the difference of stem in fem. O.C.Sl. *tě-ma* : *rąka-ma*, see § 298 p. 202.

Gen. Loc. On the difference of stem in O.C.Sl. *toj-u* : *vlŭku rąku* see §§ 310, 311 pp. 207 ff.

In Greek, *τοῖν* is used for fem. as well as masc., like *τώ*, see § 312 pp. 210 f.

Nominative Plural Masculine and Feminine.

§ **427.** *o*-stems had *-oi̯*, as against *-ōs* in the nouns. On the presumable origin of *-i̯* here, see § 186 pp. 60 f. Skr. *tḗ imḗ*, Avest. *tę̄ tōi*, *imę̄*, O.Pers. *imaiy*. Gr. *τοί οἱ*.

Lat. *istī hī quī*. O.Ir. *ind* = **sen-ti*. Goth. *þái*, O.H.G. *dē dia die*; Norse Run. *þai-ʀ* O.Icel. *þei-r* took their *-ʀ* (= pr. Germ. *-z*) from the nouns. Lith. *tẽ* Pruss. *stai quai quoi* (see J. Schmidt, Kuhn's Zeitschr. XXVII 391), O.C.Sl. *ti*. In five branches of the Indo-Germanic parent stock, as we have seen in § 314 p. 214, this pronominal *-oi̯* has passed over to the noun system.

On the other hand, *-ōs* sometimes passed from nouns to pronouns. Osc. pús Umbr. pur-e *pur-i* 'qui', Osc. pútúrús--píd 'utrique', Umbr. *eur-ont* 'iidem'. Also in Armen., *orḱ* 'which' *noḱ-a* 'they' *no-inḱ* 'the same', if Bugge is right in explaining the *-ḱ* as *-s*+*u* (see § 313 p. 212).

Remark. As regards Ir. *ē* (Cymr. *-wy* in *hwynt-wy*, Corn. Bret. *y*) Thurneysen holds it to be possible that the word is the masc. sing. *ē* (§ 414 pp. 335 f.), and that its use for the plural was due to the analogy of the interrogative. However, it must be considered whether there was not in Idg. a form **e-i̯* used for the plural. Seeing that *-o-i̯* and *-e-i̯* are both found in the nom. sing. (§ 414 p. 335), the same variation may be expected in the plural (compare **u̯e-i̯* 'we' § 441). Moreover, Pruss. gen. pl. *stei-son* seems to pre-suppose a nom. **stei̯*, for we are not justified in deriving its *ei* from an Idg. *oi̯* (see Braune, Kuhn-Schleicher's Beitr., VIII 95). As to the Irish plural variants *iat eat* and *siat seat*: in Old Irish these are found only in *olseat-som* 'say they' beside the singular *olse-som* 'says he', and similarly, we may conjecture, *cateet coteet* 'what are' beside sing. *cate cote* 'what is'. These have the ending of the 3rd. pl. of the verb (cp. Ital. *eglino*); later on, *iat siat* were detached and began an independent existence. See Zeuss-Ebel Gramm. Celt.[2] p. 372; Schuchardt, Zeitschr. rom. Phil., IV 153.

Nom. pl. *quēs* from *qui-s*, like *ovē-s*. Hence also *hēs heis* beside *hī*, which in their turn produced such plurals as *magistrēs*. See § 314 p. 214.

An obscure form is Skr. *amī́*. Its *-ī* passed into the other cases of the plural, all except the accusative (*amū́n*): thus *amī́-ṣām -ṣu -bhyas -bhiṣ*.

ā-stems had *-ās*, like the nouns. Skr. *tā́s* Avest. *tā̊*. Osc. pas *pas* 'quae'. O.Ir. *inna* = **sen-tās*. Goth. *þōs*, O.H.G. *deo dio* (= Skr. *tyā́s*). Lith. *tõs*. O.C.Sl. *ty* acc. like *rąky*. As regards Gr. *ταί* Lat. *istae*, see § 315 p. 215.

Skr. *amū́ṣ*, following *imā́s*.

Nominative and Accusative Plural Neuter.

§ 428. *o*-stems have two endings, *-ā* and *-ai̯*, corresponding to *-ā* and *-ai̯* in the nom. sing. of *ā*-stems (§ 414 p. 336). Examples of *-ā* (which is also found in nouns) are: Skr. Ved. *tā́* Avest. *tā* (Skr. *tā́ni* Avest. *yąn yąm* and *yå* see § 338 p. 238), Gr. *τᾱ* in *ἐπί-τηδε-ς* (*τᾱ́*, see p. 238), Lat. *ista*, *sī quā* Umbr. eu 'ea', O.Ir. *inna* for **sen-tā* (*-ā* possibly borrowed from *na* = **sna*, see p. 355 footnote), Goth. *þō* O.H.G. *diu* (= Skr. Ved. *tyā́*), O.C.Sl. *ta*. The following are examples of *-ai̯*: Lat. *quai quae*, *hai-ce hae-c*, *istae-c*. A.S. *dā* O.Icel. *þē* and O.H.G. Up. G. *dei*, which is perhaps a shortened form of **dei-u*, itself a re-formate which has taken *-u* from *diu* (but compare the dual *zwei* beside A.S. *twā* O.Sax. *twē* for **duoi̯*, § 293 p. 198). Lith. *taĩ* 'the, that' which has taken the place of the singular neuter **tà* = **to-d* (§ 417 p. 338), Pruss. *kai* 'what'. Others of the same kind would seem to be the adverbs Lith. *kaĩ kaĩ-p* 'how' Pruss. *kai-gi kāi-gi* 'how' (this spelling does not justify our deriving the ending from orig. *-āi̯*, cp. *māim* instead of *maim* and like forms), and further Gr. *καί* and O.C.Sl. *cě*, which also meant originally 'how, as' (the Author, Gr. Gr.[2] § 35 Anm. p. 54, § 201 p. 223); also Lith. *szeĩ-p* 'so' = *sziaĩ-p*, following which the language coined *teĩp* in place of *taĩ-p*.

This formation in *-ai̯* has not been proved for Aryan. (On the supposed Avestic nom. acc. pl. neut. *vāstrāi* in J. Schmidt's Pluralb. pp. 232 f., see Bartholomae, Stud. zur idg. Spr., I 75). Thus it would be possible to start from Idg. *-āi̯*; this being shortened to *-ăi̯* in the European languages. But it is hardly permissible to separate this formation from the similar one in the nom. sing. fem.; and since for the latter *-ăi̯* is proved by Aryan to be original, we must assume Idg. *-ăi̯* for the other as well.

The *i*-stem **qi-* went along with the nouns. Avest. *cī*. Greek Meg. *σά* 'quae?' and enclitic Ion. *σσα* Att. *ττα* (see

I § 654 Rem. p. 501). Lat. adv. *quia* beside *quae quā* like masc. *quēs* beside *quī*. See § 339 p. 239.

Genitive Plural.

§ 429. The *o*-stem ending was pr. Idg. **-oi̯-sŏm*, with a variant, as we may suggest, **-ei̯-sŏm* (cp. Pruss. *steison* § 427 Rem. p. 353); on the quantity of the vowel in the final syllable, cp. § 344 pp. 244 f. *-oi̯* and *ei̯*, which precede the ending *-sŏm*, were the endings of the nom. pl. masc. Skr. *tḗṣām ēṣā́m* Avest. *aę-taęšąm aęšąm*, Avest. *avaęšąm* O.Pers. *avaišām*; with the isolated Avest. *aę-taŋhąm*, influenced by the gen. sing. *aę-tahę*, as Goth. *þizē* instead of **þáizē* has been influenced by *þis*. A.S. *dāra* O.Icel. *þeira*; Goth. gives *þizē*, but the diphthong remains in *blindáizē* which was modelled on the now lost **þáizē* (§ 406 p. 321), O.H.G. *dero*. Pruss. *steison*, O.C.Sl. *těchŭ*; Lithuanian once had this formation, as we may assume from *músū júsū*, see § 456.

On O.Ir. *ai ae* and *ā n- a n-* see p. 339 footnote.

With the noun ending. Avest. *kąm*. Gr. *τῶν*. Lat. *eum*, Umbr. *erom ero* 'eorum' from the stem *ero-*: and Lat. *eōrum istōrum* etc. must be placed in the same class, because the ending *-ōrum* (common to nouns and pronouns) was coined to match with *-ārum* at a time when *-ārum* was the ending of nouns and pronouns alike, see § 345 p. 247. O.Ir. *inna n-* doubtless for **sen-tān* = **tōm*, beside *fer n-*.[1]) Lith. *tū*.

The Idg. *ā*-stem ending was **-ā-sŏm*. Skr. *tā́sām āsā́m* Avest. *åŋhąm*; on this analogy, Skr. *amū́ṣām*.

1) Thurneysen writes: "I should prefer to derive the gen. pl. masc. and neut. *inna n-* from **-dān* for **tōm*, cp. acc. pl. masc. *inna* from **-dās* for **tōs*. For the pronouns it is necessary to assume that accented and unaccented forms have become confused; and I imagine that in the pre-tonic **sen-do-*, the rather strong secondary accent was conditioned by the ending which the word once had. If the ending consisted of long vowel + consonant, it was rather more strongly accented; otherwise the stronger accent fell upon the first element of the word; cp. the Spanish article, sing. *el*, but pl. *los*. It is also possible that the neut. pl. comes from *na* (= **sna*) by analogy".

Gr. Hom. *τάων* Att. *τῶν* Dor. *τᾶν*. Lat. *istārum*, Osc. *eizazun-c* 'earum'. In Germanic and Slavonic the forms have been influenced by the masc.-neut.: A.S. *đāra* O.Icel. *þeira*; Goth. *þizō* first for **þáizō* following *þizōs* (but *blindáizō* has not been changed) like masc. *þizē* following *þis* (but *blindáizē*), similarly O.H.G. *dero* like sing. *dera*; O.C.Sl. *těchŭ*; cp. Att. *τούτων* fem. as well as masc., but Dor. *ταυτᾶν*, § 346 p. 248.

We see that in the classical languages nouns have borrowed the pronominal ending (§ 346 p. 248). The reverse process gives us pronouns with the noun ending in Avestic *kąm* like *vanąm*, Old Irish *inna n-* like masc. *inna n-* (of course the fem. form might also be explained as coming from **-āsŏm*), and Lithuanian *tū* like *rañkū*.

The *i*-stem **qi-*: Lat. *quium*, like *ovium*, beside *quōrum*.

Locative, Dative-Ablative, and Instrumental Plural.

§ 430. The Suffixes were the same as in the Nouns.

The ending *-o-i̯* in the nom. plural masc. of pronouns seems to shew that the ending of the Locative of *o*-stems, *-oi̯-s* (*-su -si*), Skr. *tḗṣu* etc., was once in the parent language confined to pronouns, whence it passed into the noun system; see § 186 pp. 60 f., § 357 p. 260. Armen. *oro-ç no-ç-a*, with *-o-* instead of *-oi̯-*, following *gailo-ç*, see *l. c.*

Skr. *tā́-su* from fem. **tā-* like *áśvā-su* etc. But in Slavonic the form of the masc.-neut., *těchŭ*, did duty for the fem. as well, just as happened in the gen. pl. (§ 429).

Gr. *τί-σι* is either related to *τί-ς* as *ὄφι-σι* to *ὄφι-ς*, or else it was coined in connexion with *τίν-ες* to pair with *τέκτον-ες* : *τέκτο-σι* etc. (cp. § 361 p. 263, on *κυσί*).

§ 431. In the Dative-Ablative there seems to have been a difference between noun stems and pronouns before the first separation of the Indo-Germanic peoples. The *o*-stems if pronouns had *-oi̯-* (Pruss. shows *-ei̯-*, as in *stei-son*, § 429), and if nouns, had *-o-*. This distinction was kept in Balto-Slavonic, and possibly in Germanic (that is to say, if Germ. *-m*

is something more than a mere instrumental suffix, see § 367 pp. 267 f.). Skr. *tē-bhyas* Avest. *taeibyō*, whence *vṛkē-bhyas vehrkaeibyō*. Lat. *hī-bus*, *ī-bus* = Skr. *ē-bhyás*. On the above supposition, we should add Goth. *þái-m* O.H.G. *dē-m*, beside *vulfa-m wolfum*. Lith. *tĕ-ms* O.C.Sl. *tĕ-mŭ*, beside *vilká-ms vlŭko-mŭ*, Pruss. *s-tei-mans* beside *waika-mmans* 'to the boys, or retainers'. Compare § 368 p. 269.

Skr. *tá-bhyas* Avest. *avā-byō*, Lat. *eā-bus*, Lith. *tó-ms* like Skr. *áśvā-bhyas* Avest. *haenā-byō* Lat. *equā-bus*, Lith. *raňko-ms*. But the masc.-neut. Goth. *þái-m* O.H.G. *dē-m* and O.C.Sl. *tĕ-mŭ* were used for the fem. as well.

Lat. *qui-bus* like *ovi-bus*, Goth. O.H.G. *i-m* like *ansti-m ensti-m*.

§ **432.** In the Instrumental of *o*-stems there are two distinct suffixes, as was the case with nouns.

1. The ending *-ōi̯s* in exact agreement with the nouns: Skr. *tāíṣ* Avest. *tāiš*, Gr. *τοῖς*, Lat. *hīs eīs oloes* ('illis') Umbr. *esis-co* 'cum eis' Osc. *eizois* 'eis', Lith. *taĩs*. Compare § 380 p. 275.

2. The Suffixes *-bhĭ(s)* *-mĭ(s)*, originally preceded, as in the dat.-abl., by *-oi̯-* in pronouns and *-o-* in nouns. The distinction was kept in Germanic. Skr. Ved. *tē-bhiṣ* Ved. class. *ē-bhíṣ*, Avest. *aeibiš*, whence Skr. Ved. *vṛkē-bhiṣ* Avest. *vehrkaeibiš* O.Pers. *martiyai-biš*. Goth. *þái-m* O.H.G. *dē-m* A.S. *đǣ-m* beside Goth. *vulfa-m* etc., just as in the instr. sing. A.S. *đǣm* O.Icel. *þeim* beside A.S. *miolcum* O.Icel. at *hǫfdum* (§ 282 p. 188, § 421 p. 344). O.C.Sl. *tĕ-mi*. *-oi̯-* has given place to the *-o-* of the nouns in Armen. *oro-vk'* cp. *gailo-vk'* (as in the instr. sing. *orov* : *gailo-v*, § 281 p. 186, § 421 p. 344), Gr. *αὐτό-φι* cp. *θεό-φι*, O.Ir. *cosnaib* 'with the, or those' i. e. **con sen-tobis*, cp. *feraib*.[1]) — *ā*-stems: Skr. *tā-bhiṣ ā-bhíṣ*, Avest. *ā-bīš*,

1) The form *īb ib*, given by Stokes in the paradigm of *ē* (Celt. Decl. 105), does not exist. Stokes has taken the ending of Mid.Ir. *donafīb dona hib* to be an independent word. The origin of this, as Thurneysen informs me, is as follows. In Middle Irish, the component parts of O.Ir. *donaib-(h)ī* — *-(h)ī* is a particle — became so completely one, that the

O.Ir. *cosnaib*, Lith. *to-mìs* as with nouns. Masc. form used for fem.: Goth. *þái-m* O.H.G. *dē-m*, O.C.Sl. *tě-mi*. — Goth. O.H.G. *i-m* like *ansti-m ensti-m*.

[Tables of Pronoun Declension to illustrate §§ 412—432 are given below, pp. 360—363.]

Personal Pronouns which do not distinguish Gender, with their Possessives.[1])

§ **433.** As in the Pronouns which distinguish masculine and feminine, so here, a single paradigm includes forms from

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dative ending could be added to its final *-ī*: hence *donafī-b*, or by the usual substitution of *dona h-* for O.Ir. *donaib*, *dona hīb*. Thus *īb* has about as much right to an independent existence as *δεσσι* in Greek *τοισδεσσι*.

1) To the references given in the footnote to page 322 add the following:

Schasler, De origine et formatione pronominum personalium etc. 1846. Scherer, Zur Gesch. d. deutsch. Spr.[2] 333 ff. L. Ceci, Il pronome personale senza distinzione di genere nel sanscrito, nel greco e nel latino, Giornale di filol. e ling., 1886, pp. 3 ff., 83 ff., 164 ff., 193 ff. J. Baunack, Remarques sur les formes du pron. personel dans les langues ar., en grec et en latin, Mém. Soc. ling. V 1 ff. Torp, Beiträge zur Lehre von den geschlechtlosen Pron. in den idg. Spr., Christiania 1888. Wackernagel, Über einige enklit. Nebenformen der Personalpron. Kuhn's Zeitschr. XXIV 592 ff. The Author, Zur Bildung des gen, sing. der Personalpron., *ibid.* XXVII 397 ff.

Fr. Müller, Das Personalpron. in den modernen eran. Spr., 1864.

Dronke, Beiträge zur Lehre vom griech. Pronomen aus Apoll. Dysk., Rhein. Mus. IX 107 ff. Cauer, Quaestiones de pronominum personalium formis et usu Homerico, Curtius' Stud. VII 101 ff. Schmolling, Über den Gebrauch einiger Pronomina auf att. Inschriften, 1882 and 1885. Wackernagel, Zum [griech.] Pronomen, Kuhn's Zeitschr. XXVIII 138 ff. J. Baunack, De Graecis pronominibus possessivis eorumque ablativo genetivi loco usurpato, Curtius' Stud. X 63 ff. Miklosich, Über den reflexiven Gebrauch des Pronomens *σφ* und der damit zusammenhängenden Formen für alle Personen, Sitzungsber. d. Wien. Ak. 1848, pp. 119 ff. The Author, Ein Problem der hom. Textkritik und der vergleich. Sprachwissenschaft (Reflexivpronomina), 1876. Rappold, Das Reflexivpron. bei Aesch., Soph. und Eur., 1873. Wackernagel, Zum att. Reflexivpronomen, Kuhn's Zeitschr. XXVII 279 ff.

Curtius, [Lat.] *med*, *ted*, *sed*, Stud. VI 417 ff. Buchholtz, Zum lat. Possessivpronomen, Philologus XXXVII 318 ff. F. d'Ovidio, Sui pronomi personali e possessivi neolatini, Archivio glottolog. IX 25 ff.

stems etymologically distinct; e. g. Skr. nom. *vayám* 'we' acc. *asmán* 'us'.

With this class of personal pronouns, far more commonly than elsewhere, we find forms having no recognisable case-suffix used with the meaning of some special case, e. g. Gr. *ἐμέ μὲ* used as an accusative; and forms which combine the meanings of more than one case, as **mo-i̯ *me-i̯* (Skr. *mé mē*, and so forth), which can express the meaning of locative, dative, or genitive. This poverty of inflexions shows that this class of pronouns keeps up the usage of a high antiquity. But when the languages had started each on its separate course, all manner of inflexional distinctions were made anew in this group of pronouns, and it was more closely assimilated to the other pronouns and the nouns. Thus the form of these pronouns was run into the mould sometimes of a masculine case-form, sometimes of a feminine, but at the same time no special gender was implied in the re-modelled words.[1]) Examples are (1) where the case-ending is masculine: Skr. acc. *asmán* following *tán*, *áśvān* (§ 443. 2), Gr. gen. *ἐμε-ῖο* following *το-ῖο ἵππο-ιο* (§ 450); (2) where it is feminine: Skr. loc. *asmá-su* following *tá-su*, *áśvā-su* (§ 448), O.C.Sl. instr. *mŭnoją* following *toją*, *rąkoją* (§ 449).

It is certain that in several cases the pronouns *we* and *you* had a singular ending (not, however, as we may conjecture, without expressing the plural by some sign; see § 436, with Rem. 2). But in the end their collective meaning, and their frequent use in apposition or predication with forms having a plural inflexion, caused them to take a plural ending themselves;

Gaidoz, Des pronoms infixes, Revue Celt. VI 86 ff., VII 81.

Bugge, Die Formen der geschlechtslosen persönlichen Pronomina in den germ. Spr., Kuhn's Zeitschr. IV 241 ff.

Brückner, Arch. für slav. Phil. IV 1 ff.

1) No confidence can be placed in the unique Skr. Ved. fem. *yuṣmā́ḥ* instead of *yuṣmán* in Vāj.-Saṃh. 1. 13 and 11. 47. See Delbrück, Synt. Forsch. V 204.

[Continued on page 364.]

	Pr. Idg.	Sanskrit	Avestic	Armenian	Greek	Latin
Sing. nom.	*so *sō: *qo-s: *qo-i̯ *qe-i̯:	sá sā́ ká-s ay (-ám)	aę-ša hāu kō aęm = ay(-em)	} or	ὁ ὅ-ς ὁ δ-εῖν (?)	ip-se ip-su-s quī
acc.	*to-m: n. *to-d:	tá-m tá-d	aę-te-m ta-Ḫ	[z or]	τό-ν τό	is-tu-m is-tu-d
gen.	*to-si̯o *te-si̯o (and *te-so ?): *to-i̯ *te-i̯:	tá-sya cp. mē	aę-tahę ca-hyā cp. mę̄	oroy	τοῖο τοῦ, τέο Thess. τοῖ	istī-modī istūs
instr.	*qe-na *qo-na: *toi̯-mi: *tē *tō:	kéna sanē-mi	kana tā	†oro-v	(cp. ἵ-να) πῶ, πῇ-ποκα	quō
abl.	*tōd: *tesmōd *te-smēd:	tā́d tásmād	ā Ḫ aę-tahmā Ḫ	y ormē	ὦ 'unde'	is-tō
dat.	*tesmōi̯ *te-smē(i̯): *tōi̯ ?:	tásmāi	aę-tahmāi	orum	τῷ	is-tī is-tō
loc.	*tesmi *tesmin, *tesme: *te *tē ?: *toi̯ *tei̯	tásmin	aę-tahmi	orum	(cp. ὅ-τῑμι) τῇ adv. ποῖ πεῖ	ce in ce-do hī-c
Plur. nom.	*toi̯, and *-e-i̯ ?:	té	tę̄ tōi	†ork	τοί	is-tī
acc.	*to-ns (*tōns ?): n. *tā: n. *tai̯:	tā́s tā́n tā́, tā́ni	tąn tą, yąn	z ors	τόνς τούς τά cp. καί	is-tōs is-ta quā quae
gen.	*toi̯-sōm (*tei̯-sōm):	té-ṣām	aę-taęšąm, †kąm	†oroę	†τῶν	†eum, istōrum
loc.	*toi̯-s -su -si:	té-ṣu	ae-taęšu	†oroę	τοῖς τοῖσι	is-tīs (?)
dat.-abl.	*toi̯-bh- -m- (*tei̯-bh- -m-):	té-bhyas	taęibyō	†dat. oroę, abl. y oroę	[τοῖς τοῖσι]	hī-bus ī-bus, [istīs]
instr.	*tōi̯s: *toi̯-bhī(s)-mī(s):	tāíṣ té-bhiṣ	tāiš aęibiš	†oro-vk	τοῖς [τοῖσι] †αὐτό-φι	is-tīs

* Forms later than the proethnic period, which have only their use to justify the place which they fill in the paradigm, are enclosed in square brackets [ ]. Spaced type denotes that the form contains an ending which may be considered as directly representing the Idg. form. A dagger † is prefixed to such forms as have passed from the pronomina

Umbr.-Samn.	Irish	Gothic	O.H.G.	Lith.	Pruss.	O.C.Sl.
Umbr. *e-re*		*sa*				
	ne-ch	*hva-s*	*hwe-r*	*kà-s*	*ka-s*	[*kŭ-to*]
Osc. *poi*	*cia*, *ē* (?)	*sái*	*thē* A. S. *sē*			
Osc. *ion-c*	*in n-*	*þan-a*	*de-n*	*tą̃*	*s-ta-n*	*tŭ*
Osc. *po-d* Umbr. *es-te*		*þat-a*	*da-z*	*gẽra* [*taĩ*]	*s-ta*	*to*
	ai ae	*þis*	*des*	[*tõ*]	*s-te-ssei*	*togo*, *če-so*
Osc. *eizeis*	*ind*					cp. *mi*
			A. S. *đæ-m*		*maim* (?)	*tě-mĭ*
Umbr. *sei-po-druh-pei*	*neuch*	*þē*	*diu*	*tŭ̃*	*s-tu*	
Osc. eísúd		*þamma*	*demu*	*tõ*		*togo*
Umbr. *e-smei*, Osc. *altrei*	[*neuch*]	*þamma*	[*demu*]	*támui*	*s-tesmu*	*tomu*
Osc. *ce(-bnust)*				*tamim-pi tami*, *tamè*		*tomĭ*
Osc. eíseí		*þei*		*tè*		*te*
Osc. †pús	*ind*, *ē*	*þái*	*dē dia*	*tẽ*	*s-tai*	*ti*
Umbr. *eo*	*inna*	*þans*	[*dē dia*]	*tŭs tùs*	*s-tans*	*ty*
Umbr. eu	*inna*	*þō*	*diu*			*ta*
			A. S. *đā*	*taĩ*	*kai*	cp. *cě*
Umbr. †*erom*	*ai ae*, *a n-*, †*inna n-*	*þizē*	*dero*, cp. A. S. *đāra*	†*tŭ*	*s-teison*	*tě-chŭ*
Osc. *eizois* (?)		[*þáim*]	[*dēm* A.S. *đæm*]	*tůsu tůsè*		*tě-chŭ*
		þái-m (?)	*dē-m* A.S. *đæ-m* (?)	*tĕ-ms*	*s-teimans*	*tě-mŭ*
Osc. *eizois*	†*cosnaib*	*þái-m*	*dē-m* A. S. *đæ-m*	*taĩs*		*tě-mi*

to the noun system in one of the separate branches of the language. For want of room these tables do not include the Dual cases (cf. § 426 p. 352).

2. *ā*-Stems.

	Pr. Idg.	Sanskrit	Avestic	Greek	Latin
Sing. nom.	*sā *qai̯:	sā́	hā þwōi xwaę-	ᾱ, Dor. ᾱ́	ip-sa quae
acc.	*tā-m:	tā́-m	tąm	τήν, Dor. τα-ν	ista-m
gen.	*tosi̯ās *tesi̯ās:	tásyās	aętaňhā̊	†τῆς, Dor. τᾶς	istīus, †istae
abl.	*tosi̯ās *tesi̯ās:	tásyās	aňhāþ	†τῆς, Dor. τᾶς	†istā(d)
dat.	*tosi̯āi̯ *tesi̯āi̯: Also *tāi̯?:	tásyāi	kahyāi	τῇ, Dor. τᾷ	istae
loc.	*tosi̯āi̯ *tesi̯āi̯: Also tāi̯?:	tásyām	kaňhę	Boeot. ταῖ τῆ	
instr.	*tai̯ā: Also *tā?:	táyā tyā́ (?)	aę-taya yā (?)	ᾗ, Dor. ταυτᾶ	hā-c
Plur. nom.	*tās:	tā́s	tā̊	[ταί]	[istae]
acc.	*tās:	tā́s	tā̊	τάνς τάς	is-tās
gen.	*tā-sŏm:	tā́-sām	å ɔ hąm, †kąm	τᾱ́ων τῶν τᾶν	is-tārum
loc.	*tā-s -su -si:	tā́-su	ā-hū	τῆσι, ταῖσι, ταῖς	[eā-bus]
dat.-abl.	*tā-bh- -m-:	tā́-bhyas	arā-byō	[τῆσι, ταῖσι, ταῖς]	eā-bus
instr.	*tā-bhĭ(s) -mĭ(s):	tā́-bhiš	ā-bīš	ταῖς [τῆσι, ταῖσι]	[eābus]

Umbr.-Samn.	Irish	Gothic	O.H G.	Lith.	O.C.S.
Osc. *io-c* Osc. *pae* paí	*ind*	*sō*	*diu*	*tà* Pruss. *quai*	*ta*
Osc. paam	*in n-*	*þō*	*dea dia*	*tą̃*	*tą*
	ai ei, †*inna*	*þizōs*	*dera*, A.S. *dære*	†*tõs*, cp. Pruss. *s-tessias*	*toję*
Osc. †*eiza-c*				†*tõs*	*toję*
	-ind	*þizái*	*deru dero*	Pruss. *s-tessiei* Lith. *taĩ*	*toji*
Osc. e]ísaí	*issind*	*þizái*	*deru dero*	*toj-è*	*toji*
		[*þizái*]	*deru dero*	O.Lith. *taja* *tà*	*tojǫ*
Osc. *pas*	*inna*	*þōs*	*deo dio*	*tõs*	[*ty*]
Osc. ekass	*inna*	*þōs*	*deo dio*	*tàs tás*	*ty*
Osc. *eizazun-c*	†*inna -n*	*þizō*	*dero*	†*tũ*	*tě-chŭ*
		[*þáim*]	[*dēm*]	*tō-su -sè*	*tě-chŭ*
		þái-m (?)	*dē-m*(?)	*tó-ms*	*tě-mŭ*
	cosnaib	*þái-m*	*dē-m*	*tō-mìs*	*tě-mi*

e. g. in Ion.-Att. ἡμέας takes the place of *ἥμε = Lesb. ἄμμε (cp. ἐμέ).

By the pluralised ending, the forms of *we* and *you* were carried away from those of *I* and *thou*; but the two pairs were brought in touch again by the action of analogy. For example, **tŭ* 'thou', has influenced *duk̑* 'you' in Armenian, and *tumhe* 'you' in Pali (compare Ved. *yuṣmé*). See § 437.

In the parent language, these pronouns had few points of contact with the other pronouns or the nouns, and formed a little world by themselves. Thus their history is more instructive than that of other classes of words, if we wish to observe the working of association, and the kaleidoscopic changes which its influence produces. This will be clear even in spite of the cut and dried form of presentment made necessary by the plan of the present work, in which the historical method, that is, the true scientific method, has to give place to lists and catalogues with little more than hints to explain them.

1. *Etymology of the Pronouns; the Formation of the Stem.*

§ **434.** The pronoun *I* shows the following forms.

1. Nom. **eĝh-* and **eĝ-* (for the variants *ĝh* : *ĝ* see I § 469. 8 pp. 346 f.). Skr. *ahám* Avest. *azem*. Armen. *es* is obscure; we cannot say whether it should be derived from **eĝh-* or **eĝ-*.[1])

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1) From **eĝh-* one would have expected **ez*, cp. *lizum*: Skr. *lĕ́hmi* I § 410 p. 301. **ez* may have become *es* before a breathed initial in the following word; but certainly we have to face the question why this sandhi-form has become universal in this particular word, and not in *k̑ez*, for example. Idg. **eĝ-* one would expect to become **ec* to begin with (I § 409 p. 301). But there may have been *s* as well as *c* in Armenian, as we find *z* beside *j* = *ĝh*, a point which needs closer investigation (cp. Von Fierlinger, Kuhn's Zeitschr. XXVII 479). Anyhow the laws of Armenian which touch this matter must be more exactly worked out before it is safe to venture on taking the step which Bartholomae takes. He derives *es* from an Idg. **ek̑*, which be believes to be the form assumed by **eĝ* at the end of a sentence (Bezz. Beitr. XIII 54). I do not believe

Gr. ἐγώ. Lat. *ego*. Goth. *ik* O.H.G. *ihha* from **eǵ-*, but Norse Run. *'ga* (*'ʒa*) beside *'ka* from **eǵh-*; in West-Germ. also **īk* (A.S. *īc* Mod.H.G. Frank. *aich*), which is incomprehensible unless it be a mere lengthening on the analogy of **þū*. O.Lith. *esz* Mod.Lith. *àsz* Lett. *es* Pruss. *es as*, with the sibilant changed from voiced to breathed at the end of a sentence and before a breathed initial in the following word (it must be mentioned in this connexion that Pruss. *s* represents the sounds *s* and *z* both); the reason why *e-* became *a-* in Mod.Lith. *àsz* Pruss. *as* is obscure. O.C.Sl. *azŭ jazŭ* Mod.Slov. *ja* point to an older **ĕzŭ* (I § 76 p. 66): here *e* has been lengthened on the analogy of *y* in *ty*, as the vowel of West-Germ. **īk* was lengthened by association with **þū*.

The consonant of **eǵh-* is found again in the dat. Skr. *máhyam*, Lat. *mihī* Umbr. *mehe*, Armen. *inj* (for **emeǵh-*). The forms appear to have been made up thus: *e*+*ǵh-* and *me*+*ǵh-* (*eme*+*ǵh-*). But perhaps the dative once began with **eǵh-*, and its initial was afterwards changed on the analogy of the other oblique cases.

2. **eme- *emo-*, **me- *mo-*. It cannot be determined whether **eme-* was the original form, and **me-* is an ablaut weakening of it (cp. **teu̯e- *teu̯o-* : **tu̯e- *tu̯o-*, § 435); or whether **eme-* is a combination of the pronominal stems *e-* and *me-* (cp. Gr. ἐ-κεῖ Lat. *e-quidem* and the like, § 409 pp. 327 ff., and what is said on **eǵh-* above, subdivision 1). Skr. *mē* Avest. *mę̄* O.Pers. *maiy*; gen. Skr. *máma* perhaps instead of **ama*, see § 450. Armen. gen. *im* for **eme*; **me-* in *mek* 'we' (§ 437. 1, *a*). Gr. ἐμοί and μοὶ. Lat. *mī*. O.Ir. *mē*. Goth. *mi-k* O.H.G. *mi-h*. Lith. *manę̀*, O.C.Sl. *mę*.

§ 435. The pronoun *thou* shows the following stems, all closely connected together:

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that any such form for the nominative of this pronoun, without any vowel following the palatal stop, can be proved for the parent language; see § 439.

1. *teu̯e- *teu̯o-. Skr. *táva* Avest. *tava.* Gr. *τεῖν τεό-ς.* Lat. *tovo-s tuo-s.* O.Ir. *do-* Mid.Cym. *teu.* Lith. *tavę̃ tãva-s.*

2. *tu̯e- *tu̯o-. Skr. *tvám* Avest. *þwąm* O.Pers. *þuvām.* Armen. *ḱez ḱo* (I § 360 p. 276). Gr. *σέ σοί.* Pruss. *twais* O.C.Sl. *tvojĭ.*

3. *te- *to-. Skr. *tē* Avest. *tę̄* O.Pers. *taiy.* Gr. *τοὶ.* Lat. *tē tibī.* O.Ir. *uait* 'from thee' for **ua ti* (or for **ua tu̯i*?). Goth. *þeina*, O.H.G. *di-h.* O.Lith. *ti* Pruss. *tebbei*, O.C.Sl. *ti tebě.*

4. **tu* **tū*, nom. and acc., Skr. *tuv(-ám)* Gr. *σύ* etc., see §§ 440, 442.

Similar variants are found of the reflexive stem, § 438: **seu̯e-*, **su̯e-*, **se-*, but there is no **sŭ-* among the cases to be parallel to **tŭ* (Torp, Beitr. zur Lehre von den geschl. Pr. 14, conjectures that this grade of the stem is the prefix Skr. *su-* etc. 'good', but it is more likely that *su-* contains the suffix *-u-* of *ἡδ-ύ-* and the like). There is an ablaut-connexion between **teu̯e- *seu̯e-* : **tu̯e- *su̯e-* : **tŭ*. But the relation of **te- *se-* to these forms is doubtful.

Remark. In view of doublets like *ϝεξ ἕξ* = **σϝεξ* and Latin *sex* (§ 170 p. 16, above), it might be assumed that *u̯* was dropped by **tu̯e- *su̯e-* in the parent language when these stems were used in the neighbourhood of some particular sound or sounds in a sentence. Whether this happened to them when used as enclitics, as I have followed Wackernagel in assuming above (vol. I § 187 p. 162) is doubtful. Torp's objection (*op. cit.*, p. 10) that there is no *u̯* in Avest. *taibya*, which is accented, but that *u̯* is found in Skr. *tvā u̯*, which is not, is easily met by assuming that the original relations were upset by analogy; besides, it is possible that the form Skr. *tvā* came to be used without the accent at some period when the law under which *u̯* dropped was no longer effective. Torp (pp. 5, 9, 12) and Johansson (Bezz. Beitr. XV 313 f., XVI 163) think that **teue* and **seu̯e*, which were weakened by some ablaut process to **tu̯e su̯e *tu *su*, were compounds consisting of **te *se* + **u̯e* (Torp identifies **u̯e* with the stem of Skr. *vas* Lat. *vōs*, just as he connects *-*ne* in the gen. O.C.Sl. *me-ne* Avest. *ma-na* with Skr. *nas* Lat. *nōs*); and that these unextended ground-forms are still forthcoming in Skr. *tē* Prākr. *sē* etc., as representing **te- *to- *se- *so-*. This view would be supported by Gr. *σ-φί*, if it could be proved that its *σ-* is an ablaut-grade of the *se-* in O.C.Sl. *se-bě* Lat. *si-bī* etc.; but this is hardly likely ever to be proved.

§ 436. The pronoun *we* shows the following stems:

1. **u̯e- *u̯o-*. Skr. *vay-ám*, Avest. *vaęm*. Goth. *veis* O.H.G. *wir*. Also in the dual: Goth. *vi-t*, Lith. *vė-du*, O.C.Sl. *vě*.

2. **ne- *no-*, **ne-s- *no-s-*; the *s* is probably the same as the sign of the plural found in nouns, since it only appears in the plural of the pronoun (and of **u̯e-s- *u̯o-s-* 'you') and never in the dual. Skr. *nas*, Avest. *nō*. Lat. *nōs*. O.Ir. *ni*; on *sni* see Rem. 2, below. Goth. *uns* = **n̥s*. O.C.Sl. *nasŭ*. Also in the dual: Skr. *nāu*, Gr. *νῶι*, O.Ir. *nāthar*, Goth. *ugk* = **n̥-ke* (cp. *mi-k*), O.C.Sl. *na*; the *ā-* of Skr. *āvám* may come from **n̥̄*, and its *-vam* may have been borrowed from *yuvám* = *yū* + *am*, see § 457.

Further, we have **n̥-sme*, or rather **n̥s-sme* (cp. Rem. 2), which contains the same particle which we noticed in Skr. *tá--smād* etc., § 424 p. 349. Skr. *asmán* Avest. *ahma*, Gr. Lesb. *ἄμμε* Att. *ἡμᾶς*.

The pronoun *you* shows the following stems:

1. **i̯u-*. Skr. *yūyám*, Avest. *yūš*. Armen. *jez* with *e* on the analogy of *mez* 'nobis'. Goth. *jūs*. Lith. *jūs*. Also in the dual: Skr. *yuvám*, Goth. **ju-t* (§ 457 p. 397), Lith. *jù-du*.

2. **u̯e- *u̯o-* and **u̯e-s *u̯o-s-* (cp. **ne-s- *no-s-* above). Skr. *vas*, Avest. *vō*. Lat. *vōs*. Pruss. *wans*, O.C.Sl. *vy vasŭ*. Also in the dual: Skr. *vām*, O.C.Sl. *va*.

Thurneysen is doubtless right in assuming **usme*, **us-sme* (cp. Rem. 2) parallel to **n̥sme*, **n̥s-sme* in the first person (Kuhn's Zeitschr. XXVII 175). Hence come Lesb. *ὔμμε* Att. *ὑμᾶς*, also Skr. *yuṣmán* Avest. *yūšmai-bya*, which have taken *y-* from being associated with the nom. Skr. *yūyám* Avest. *yūš* (cp. O.Dan. *vos(s)* beside *os(s)* 'us' following the nom. *vī* 'we').

Remark 1. Since Avest. *yūšma-* is always written with *ū*, perhaps more weight should be given to the fact that the vowel is written long here than in other instances: *ū* was borrowed from the nom. *yūš yūžem*. The relation of the variant *xšma-* to *yūšma* is obscure (cp. Bartholomae, Ar. Forsch. III 19 f.).

Remark 2. There is more to be said for taking **n̥s-sme* and **us-sme* than for taking **n̥-sme* and **u-sme* to be the ground-forms; for

Skr. *tásmin* and the like (§§ 423 f. pp. 346 ff.) prove that *-sme* implied no particular number, and the forms of **ne-* and **u̯e-* which are not compounded with it seem to have once had *-s*, the plural sign, added to them in all other instances when they were not dual but plural. It is therefore incorrect to say that forms like Avest. *ahma* Lesb. *ἄμμε* had no plural sign; they did have one, but it came before *-sme*, and the acc. **n̥ssme* was simply **n̥s* = Goth. acc. *uns* + a particle **sme*. Compare what is said above on deriving Lith. *tamè* from an Idg. loc. **te-sme* (§ 424 p. 350).

3. There may have been a close connexion in origin between Gr. dual *σ-φώ* 'you two', O.Ir. *si* (*-b* in old enclitic position) = Cymr. *chwi* for **s-u̯es*, and Goth. *iz-vis*. They all have *s*, which seems to represent another distinct stem.

Remark 3. In O.Icel. *yðr yðvar*, *ð* has taken the place of *z* (*R*): one of the two *R*'s in **iRviR *iRvaR* became *ð* by dissimilation, as in *fréðinn* instead of *frerinn* and the like (see Bugge, Kuhn's Ztschr. IV 252). From these words we get a Goth.-Norse **izu̯i-*, which may have been a transformation of **s-u̯i- *s-u̯e-* on the analogy of **iu̯i-*, which is found in West-Germanic, and forms a constant variant of **i̯u-* (Lith. *jūs*). But another view is far more probable. Proethnic Germanic had the doublets **u̯e(s)* and **s-u̯e(s)*. To both was prefixed the particle *e*, seen in Gr. ἐ-κεῖ, Skr. *a-dyá* 'to-day' *a-sāú* 'that yonder', Lat. *e-quidem* Umbr. e-tantu 'tanta' and like words (§ 409 pp. 322 ff.), and perhaps in Lat. *e-nōs* in the Song of the Arval Brethren (cp. § 437. 1, *a*). Then the relation between **e-u̯e-* (West-Germ., O.H.G. *iu* A.S. *eów* etc.) and **e-s-u̯e-* (Goth.-Norse) was the same as that between Umbr. e-tantu and e-s-tu 'istum' (compare Lat. *istum*).

On this view, the parts of the words preceding **u̯e(s)* had nothing to do with expressing the meaning of the 2nd person; and this would make it not far-fetched to connect *σ-φώ* with *σ-φίν*, (cp. Wackernagel, Kuhn's Ztschr. XXVIII 139 f.).

Torp's theory (*op. cit.*, 35) that **isu̯i-* is **i̯us+u̯e-*, is quite as mistaken on phonetic grounds as his assumption that in West-Germanic the *z* of Goth. *izv*, becoming *r*, disappeared first in the gen. O.H.G. *iuwēr* O.Sax. *iwar* by dissimilation, and then the acc. O.H.G. **irwih* became **iuwih* on their analogy.

As regards the Keltic form, it would certainly be possible to hold that *s-* in pr. Keltic was detached from the ending of the 2nd. person plural of the verb, and then was tacked on to the pronoun (Torp, p. 40); the only thing is that we do not know whether this personal ending was **-tes* in Keltic at all (cp. Lat. *legitis*). The *s-* of Ir. *s-ni* has not been found in the British dialects of Keltic. It may come from the frequent combination of the word with *is*, *issni* being supposed by the speakers to consist of *is+sni*, just as in Mid.Ir. the nom. *sē* instead of *ē* grew out of *issē isē* 'est is' = *is ē*, and perhaps at the same time out of *olse* 'inquit'

(Thurneysen). But it may have been due to the analogy of **s-ue-* 'vos', and this may have happened in the period before insular Keltic split up into its several dialects (cp. § 437). The student should however compare O.Ir. forms without *s*, *nāthar nār* 'of us two'.

§ **437.** In the various languages, the stems of these pronouns suffered many changes by assimilation of one to the other. Some of these have been already touched upon. We subjoin a conspectus of the whole.

1. *We* assimilated to *I*, *you* to *thou*.

a. *We* assimilated to *I*. Pali *mayaṃ* instead of Skr. *vayám*. Armen. *mek*; from this nominative, *m-* passed into the other cases, driving out *n-*, e. g. instr. *me-vk*, just as in Lith. e. g. dat. **nu-mus* became *mu-mus* on the analogy of *mēs* (see below). Mod. Gr. ἐμεῖς instead of ἡμεῖς. Lat. *enōs* (Arval Song), instead of *nōs*, follows *ego* (Stolz Lat. Gr.[2] p. 346), unless *e-* is a prefixed particle (like *e-quidem* etc.). Lith. *mẽs* O.C.Sl. *my* (whence Lith. has *m-* in the dual too, *mù-du*). In Baltic the *m-* passed first from nom. to acc.: Lith. *mùs* Pruss. *mans* (but O.C.Sl. *ny* unchanged); then *m-* spread to the other cases in Lithuanian, *músū mùms mumìs mūsyjè*, but Pruss. *nouson noumans* are unchanged (O.C.Sl. *nasŭ namŭ nami*).

Remark 1. *m-* in O.Icel. *mēr* instead of *vēr*, and in H.G. dial. *mir mer* instead of *wir*, comes from the final consonant of the verb which preceded. The dental of O.Icel. *þēr ðēr* and H.G. *dir der* 'vos' has the same origin.

b. *You* assimilated to *thou*. Pali *tumhe* instead of Ved. *yuṣmé*. Armen. *duk* (but *j-* remained in the other cases; in the 1st person, on the other hand, *n-* was displaced by the *m-* of the nom.). Mod.Gr. ἐσεῖς following ἐσύ (with ἐ- on the analogy of ἐγώ).

Remark 2. The reverse change — *I* and *thou* following *we* and *you* — can only be found in the case endings: e. g. Pali gen. *mamaṃ tavaṃ* instead of *mama tava* following *amhākaṃ tumhākaṃ*, Avest. dat. *taibyō* following *yūšmaoyō* (§ 445), Mid.H.G. gen. *mīner dīner* instead of *mīn dīn* following *unser iuwer*.

2. *I* assimilated to *thou*, *we* to *you*, and *vice versa*.

a. *I* assimilated to *thou*. O.Ir. gen. (poss.) *mo mu* Mid.Cymr. *meu* following *do du* Mid.Cymr. *teu*. Lith. gen.

manę̃s doubtless has *a* instead of *e* (cp. O.C.Sl. *mene*) on the analogy of *tavę̃s* (a different explanation is offered by Brückner, Archiv IV 17). West-Germ. **īk* 'I' O.C.Sl. *(j)azŭ* with long vowel on the analogy of **tū*, see § 434 p. 365.

b. *Thou* assimilated to *I*. Mod. Gr. ἐσύ following ἐγώ. Perhaps Umbr. *tiom* follows **miom* (*vice versa*, we have French *mon* following *ton*), see § 442. Cymr. *dy* follows *my* (*n-*).

c. *We* assimilated to *you*. Skr. dual *āvám* may have taken *-vam* from *yuv-ám*, as we would conjecture; see § 436 p. 367. Gr. Dor. ἁμές Att. ἡμεῖς has taken the rough breathing from ὑμές ὑμεῖς. O.Ir. *s-ni* beside *ni* perhaps follows **s-u̯e-*, see § 436 pp. 368 f. In Baltic, the *ŭ* of *jŭ-* was borrowed: Pruss. *nou-son nou-mans* (*ou* = *ū*) following *iou-son iou-mans* (cp. O.C.Sl. *na-sŭ na-mŭ*), Lith. *mú-sū mù-ms* etc. (with *m-* instead of *n-*, see under 1. *a* above), following *jú-sū jù-ms* etc. Lith. *mẽs* instead of **mĕs* doubtless follows *jūs*.

d. *You* assimilated to *we*. Skr. *yūy-ám* takes its *-y-* from *vay-ám*. Armen. *jez jer* etc. take *e* from *mez mer* etc., in place of *u*. O.H.G. *ir* A.S. *ȝē* O.Icel. *ēr* following *wir wē̆ vēr* (Goth. *jūs*), and similarly in the dual A.S. *ȝit* O.Icel. *it* following *wit vit* (Goth. **ju-t*). Again, Goth. *iggis* O.Icel. *ykkr* H.G. *ink enk* A.S. *inc* follow Goth. *ugkis* O.Icel. *okkr* A.S. *unc*: parallel to the acc. *ugk* = **u̯-ke* (§ 436 p. 367) there may once have been **u-k(e)*, in which *u-* is the weak grade of **u̯e-*; this would become **ink-* **inku̯-*, because the relation of *uns-* : *izv-* (West-Germ. *iu̯-*) suggested that *i-* was the characteristic of the second person (cp. Torp, *op. cit.*, p. 49; Johansson, Bezz. Beitr. XVI 144).

§ **438.** The Reflexive Stems were **seu̯e-* **su̯e-* **se-*, connected in the same way as **teu̯e-* **tu̯e-* **te-*, see § 435 p. 366.

1. **seu̯e-* **seu̯o-*. Avest. *hava-* 'own'. Armen. gen. *iu-r*, cp. vol. I § 560 p. 416. Gr. ἑέ ἑίν, ἑό-ς. Lat. *sovo-s suo-s*, Osc. suveís gen. 'sui'. It is not certain whether we ought to add Mid.Cymr. *eu* Bret. *ho* 'you', plural of *y e* 'eius' (footnote

on pp. 339 f.), Kelt. **soṷo-* for **seṷo-* according to I § 66 p. 56, thus the stems which represent the singular and the other numbers would be just the reverse of what is seen in the French representatives of *suus* and *illorum*; it would be also possible to connect *en* and *ho* with Ar. *ava-* O.C.Sl. *ovŭ* (§ 409 p. 329); or again, to regard them as dual genitives of *y e* answering to Skr. *ayóṣ* (cp. Bavar. dual *eȝ* and *enk* used for the plural as equivalent to Mod.H.G. *ihr* and *euch*). Lith. *savè sãva-s.*

2. **sṷe- *sṷo-*. Skr. *svá-s* Avest. Gāthic *hva-* O.Pers. *uva-* 'own' (I § 558. 3 p. 414). Armen. *in-ḱn* 'ipse', gen. *in-ḱean.* Gr. ἕ, ὅ-ς. Umbr. svesu 'suum'. O.Ir. *fēin fodēin* 'self'. Goth. *svēs* (gen. *svēsis*) 'own'. Pruss. *swais* O.C.Sl. *svojĭ* 'suus, own'.

3. **se-*. Prakr. *sē*, Avest. *hę̄ šę̄* O.Pers. *šaiy*; the variation *h- š-* in Iranian depended upon the final sound of the word preceding (cp. I § 556. 1 p. 410), but by levelling one or other form came to be used generally, the Gāthā dialect discarding the forms with *š-*, and Old Persian those with *h-*. Gr. ἕ οἷ for **σε *σοι* beside ϝέ ϝοῖ? Lat. *sē sibī*, Umbr. *se-so* 'sibi' Osc. sífeí 'sibi'. Goth. *si-k* O.H.G. *si-h.* Pruss. *sebbei* O.C.Sl. *sebě* 'sibi'.

No sufficient explanation has been given of the etymology of Gr. *σφοῦ σφί(ν)* etc. This stem seems to have started from *σ-φί(ν)* (with the case-suffix *-φι -φιν*); *σ-φί(ν)* being associated with *ἐμίν ἄμμιν* and the like, produced *σφέ σφοῦ*, etc. to match *ἐμέ ἄμέ, ἐμοῦ* etc. See the Author, Kuhn's Zeitschr. XXVII 399 f., Gr. Gr.[2] p. 134; Wackernagel, Kuhn's Zeitschr. XXVIII 139 ff.; and in the present volume, § 435 Rem. p. 366, § 436 Rem. 3 p. 368.

The Reflexive shared in the analogical changes described in § 437. Sometimes it affected other stems; for example, the reflexive and the pronoun of the 2nd person together caused changes in the forms of the 1st person, as Lith. *manè*, which took *a* from *tavè* and *savè*. Or again, it was itself subject to change on the analogy of the other pronouns; e. g. Gr. Lesb.

ἄσφι ἄσφε (if indeed these forms are to be allowed at all, on which matter see Wackernagel as cited above, p. 141), which took *ἀ-* from *ἄμμι ἄμμε*.

2. *Personal Pronouns: their Cases.*[1])

a. *I* and *thou*, the plurals *we* and *ye*, the Reflexive, and their Possessives.

Nominative.

§ **439**. *I.* The proethnic form may be conjecturally restored **eĝ(h)o* and **eĝ(h)ō* (cp. **so* and **sō*, § 415 p. 337), sometimes extended by the particle *-m*.

1. **eĝ(h)o.* Pr. Germ. **eku*, which, after undergoing certain modifications due to varying accent and varying position in its clause, becomes Goth. *ik*, O.H.G. *ihha ih 'h*, Norse Run. *'ka 'k 'ga ek ik* O.Icel. *ek* O.Swed. *iak*; cp. Noreen Arch. Nord. Phil. I 175 ff., and Paul's Grundr. I 498; Brate, Bezz. Beitr. XI 174 f.; Burg, Die ält. nord. Runeninschr. 20 f., 51; Kluge, Paul's Grundr. I 347, 359 f., 394; Bremer, Zeitschr. deutsch. Phil. XXII 249; Johansson, Bezz. Beitr. XVI 166, 169 f. Lith. *esz àsz* Pruss. *es as* Lett. *es.* Perhaps Armen. *es.* — **eĝ(h)om.* Skr. *ahám* Avest. *azem* O.Pers. *adam.* O.C.Sl. *azŭ*; as to the *ja* of the modern dialects see Solmsen, Kuhn's Zeitschr. XXIX 79.

2. *eĝhō.* Gr. *ἐγώ.* Lat. *ego.* Perhaps Armen. *es.* — **eĝ(h)ōm.* Gr. *ἐγών* Boeot. *ἰών ἰών* (cp. the Author, Gr. Gr.[2] p. 132).

In Old Irish the acc. form does duty for the nom. in singular and plural; sing. *mē me-sse* 'I' (§ 442), cp. pl. *ni* and *si-ssi si-b*, which have driven out the old Idg. nominatives **u̯ei̯* and **i̯ūs* (§§ 441, 443). Be it observed that in the second person *tū tu-* **-tu* stand for both nom. and acc. (§ 440, below).

1) In this chapter the forms belonging to the separate languages, and those which are probably to be assumed for the parent language, are less easily taken in at a glance than has been the case in the two previous (chapters pp. 66 ff., 334 ff.). We therefore call special attention to the reference tables at the end.

§ **440.** *Thou.* Pr. Idg. **tu* and **tū* (cp. § 415 Rem. p. 337), also with the particle *-m*.

1. **tu.* Skr. *tú* (which, like *tū́*, has become a mere particle, see Osthoff, Morph. Unt. IV 268). Gr. Dor. *τύ*, Att. *σύ* (*σ-* from the other cases, where it cames from *tu̯-*, I § 166 p. 147). O.Ir. *tu-ssu tu-sso.*[1]) O.Icel. *đu đo* O.H.G. *du* (Goth. *þu-k* acc., see § 442).

2. **tū.* Skr. *tū́* (like *tú*, see under 1). Lat. *tū.* O.H.G. *dū* O.Icel. *þū.* Pruss. *tou* (*ou* = *ū*), O.C.Sl. *ty.*

In the following instances, the original quantity cannot be determined. Avest. *tū.* Armen. *du* (*d-* doubtless when *-n* and *-r* preceded, then fixed as the type, see Bartholomae Lit. Centr. 1890 col. 321, and cp. *-d* 'the' § 409 p. 327). O.Ir. *tū*, which might be orig. **tŭ*, because monosyllables bearing the accent, if they ended in a short vowel, lengthened it (Thurneysen, Kuhn's Zeitschr. XXXI 91), cp. *mē* for **me* § 442. Goth. *þu* (cp. *þu-s þu-k* with *ŭ*). Lith. *tù.*

With the *m*-particle: Skr. *tuvám* = *tū*+*am*, *tvám* = *tu*+*am*, Avest. Gāthic *tvēm* later Avest. *tūm* O.Pers. *tūvam* (read *tuvam*) all three = Ved. *tuvám*; Gr. Hom. *τύν-η* Boeot. *τούν* Lac. *τούν-η* (quantity of *ου* in the last two is uncertain). The ending of the particle has obvious resemblance to the ending of the 1st person (cp. Skr. *ahám* and Gr. *ἐγών*), and thus J. Schmidt, perhaps correctly, explains Skr. *tuvám* Hom. *τύν-η* etc. as later formations following the analogy of the first person; this is supported by the fact that the Aryan

1) *-su -so* (after palatal vowels *-siu -seo*) is the "particula augens" of the 2nd person, as *-sa* (after palatal vowels *-se*) is that of the 1st person, in *me-sse* 'I'. Both particles are suffixed to these persons of the verb, but they are not found in verbs and pronouns only. They were certainly cases of pronouns or adverbs, and connected with *-sin* and *-som*, cp. Gall. *sosin* 'of this'. As regards the relation of *-sa -se* and *-su -siu* to the various persons, Thurneysen writes: "It seems to me quite possible that *-su* in verbs was originally the pronoun *-tu* (this is supported by the British dialects), e. g. *do-bir-siu* for **do-beres-tu *do-beressu*, and that *-tu* then became confused with the deictic particle *-su.* The result of this may have been that *-sa -se* were appropriated to the 1st person, as in Italian *vi* = *ibi* and *vos* caused the use of *ci* for 'us'."

forms for 'you' which have *-am* took this element only on the analogy of *vay-ám* (§ 441).

The form **tŭ* is also used for the accusative in three branches of Indo-Germanic, see § 442.

On Osc. tiium tiú 'tu', see § 442.

§ **441.** *We* and *you.*

Idg. **u̯e-i̯* 'we'; the kindred of this form is doubtful. As with **i̯ū-s* 'you', so with **u̯e-i̯*, it is uncertain whether we should compare it with singular or plural forms. Is **u̯e-i̯* to be classed with **e-i̯* 'he' **qo-i̯* 'who' (§ 414 pp. 335 f.), or with plural forms like **to-i̯* 'those' (§ 427 pp. 352 f.); does **i̯ū-s* contain the *-s* of the nom. sing. (cp. e. g. Gr. *ὀφρῦ-ς*) or the plural sign *s*? Skr. *vay-ám* Avest. *vaęm* i. e. *vayem* O.Pers. *vayam.* Goth. *veis* Norse Run. *vīʀ* O.Swed. *vī(r)* for **u̯ei̯-s* with *-s* on the analogy of (Goth.) *jūs.* Evidence for a ground-form **u̯e-s* (cp. dual Goth. *vi-t*), perhaps also a re-formate following the 2nd person, (*vice versa*, Skr. *yū-y-ám* follows *va-y-ám*), is found in O.H.G. *wir* O.Icel. *vēr*, and further in Armen. *mekʿ* Lith. *mẽs* (see below).

Idg. **i̯ū-s* 'you' (is this the singular or plural *-s*? see above). Avest. *yūš*, also *yūž-em* with *-em* following *vaęm* i. e. *vayem* (why *-em* was added to just this sentence-doublet **yūž*, I § 646. 3 p. 491, and not to *yūš*, is obscure); Skr. *yūyám* follows *vayám.* Goth. *jūs*; beside this, A.S. *ȝe ȝē*, O.Sax. *gi ge*, O.H.G. *ir*, O.Icel. *ēr* following *we wē*, *wi we*, *wir*, *vēr* (as in the dual A.S. *ȝi-t* O.Icel. *i-t* follow *wi-t vi-t*, § 457): first **i̯ū-z* became **i̯e-z*, and afterwards in O.H.G. and Norse, the initial *i̯-* itself was changed, perhaps by the influence of *iuwēr* and *yđvar* etc. Lith. *jũs* Pruss. *ious.*

Armen. *mekʿ* and *dukʿ*, whose initial is borrowed from the pronouns *I* and *thou* (§ 437. 1 p. 369), doubtless took the place of **vekʿ* or **gekʿ* (I § 162 p. 145), and **jukʿ.* On the *-kʿ*, see § 313 p. 212. **vekʿ* would answer to O.H.G. *wir.*

Greek. Lesb. *ἄμμε-ς ὔμμε-ς* Dor. *ἁμέ-ς ὑμέ-ς* are re-formates following the other cases, acc. Lesb. *ἄμμε ὔμμε*

etc. In Ion.-Att., *ἡμες *ὑμες became ἡμεῖς ὑμεῖς on the analogy of such forms as σαφεῖς, because of the resemblance between ἡμέων ὑμέων: σαφέων; so also σφεῖς beside σφέων.

Lat. *nōs vōs* (Pelign. *vus* 'vos' is dubious, see Bugge, Altital. Stud. 75) are the acc. form = Avest. *nå vå*. So also O.Ir. *ni si-ssi*, = Skr. *nas vas*. See § 443.

Lith. *mẽs* Pruss. *mes* (beside *jũs ious*) doubtless stands for **u̯es* (§ 437. 1, *a*. p. 369, and 2, *c*. p. 370) = O.H.G. *wir*. O.C.Sl. *my vy* are probably the acc. *ny vy* (*my* has *m*-through being confused with a formation answering to the Baltic), and were used for the nom. because *rąky* was so used (§ 315 p. 216, *ny vy* : *namŭ vamŭ nami vami* = *rąky* : *rąkamŭ rąkami*). At least this is more probable than that there was a nom. **i̯ūs* = Lith. *jũs*, which on the analogy of the other cases became **u̯ūs* = the *vy* of our texts, and then this became *my* (cp. Lith. *mù-ms*, Pruss. *nou-mans* following *jù-ms iou-mans*, § 437. 2, *c*. p. 370).

Accusative.

§ **442.** *I* and *thou* and the Reflexive. Pr. Idg. **eme* **me*, **tu̯e* **te*, **su̯e* **se*, and **mē*, **tu̯ē* **tē*, **sē* (cp. § 415 Rem. p. 337), the last four also with the *m*-particle.

1. **eme* **me*, **tu̯e* **te*, **su̯e* **se* and perhaps **seu̯e*. Armen. *z is*, *z k̔ez* probably for **eme-ĝhe* **tu̯e-ĝhe*, see below. Gr. ἐμέ μὲ, Cret. τϝέ (in Hesychius, where it is incorrectly written τρέ) Ion. Att. σέ Dor. τέ, ϝέ ἕ, Hom. ἔέ (= Idg. **seu̯e*?); Cypr. μέ-ν, and ἐμέν on a late metrical inscription (214 A. D.), which doubtless has not the particle *-m* of Skr. *mám* etc., but the sign of the accusative. O.Ir. *me-sse* (on *-sse* see p. 373 footnote 1) and *mē*, with non-original lengthening of *e* (cp. what it is said of *tū* § 440 p. 373), which were also used for the nominative (§ 439 p. 372); unaccented **me* e. g. in *fri-m* 'contra me'; unaccented **te* cannot be inferred with any certainty from *fri-t* (beside *friut*) and the like, see the Remark on page 377. Goth. *mi-k si-k*, O.H.G. *mi-h di-h si-h*,

O.Icel. *mi-k þi-k si-k*, *-k* = Gr. *-γε* in *ἐμέ-γε* and the like; on Goth. *þu-k*, see page 377.

Armenian. *is* doubtless for **ims* (I § 202 p. 169) instead of **inj*, the form which might have been expected, as we have in the dat. *inj* beside *ḱez*. Since nom. and acc. ran together in nouns and in pronouns which distinguish gender, it is not too bold to conjecture that *-s* has come from the nom. *es* (cp. § 434 p. 364). Then the **-j -z* of the acc. is doubtless the particle **ĝhe* = Skr. *ha* (cp. I § 410 p. 301), so *z is* is like Gr. *ἐμέ-γε* and *z ḱez* like Gr. *σέ γε* O.Icel. *þi-k*. The *-j -z* of the dative I compare with the endings of Lat. *mi-hī* Skr. *má-hyam* (§ 446).

2. **mē*, **tu̯ē *tē*, **sē*. Skr. *mā tvā*, Avest. *mā þwā*. Lat. *mē tē sē*; the old Lat. acc. *mēd tēd sēd* are doubtless really ablatives (§ 444); these must first have been used for the accusative because *-d* dropped before consonants (cp. *sē--grego* beside *sēd-itio*), and thus the forms in the accusative and ablative became to some extent identical (abl. *mē* and acc. *mē*), whilst the instinct of the speaker could not distinguish between them; see Osthoff, Perf. 127 f., and Stolz, Lat. Gr.[2] pp. 345 f. A less probable theory is supported by M. Müller (Fleckeisen's Jahrb. CXIII 702 f.) and Torp (*op. cit.*, 10). These scholars hold that the acc. *mēd* etc. belong to a period when the ablative suffix *-d* of the personal pronouns was less restricted in its use than it afterwards came to be, and that the acc. *mēd* is therefore a very old form.

With the *m*-particle, Idg. **mēm* etc. Skr. *mā́m tvā́m*, Avest. *mąm þwąm* O.Pers. *mām þuvām* (i. e. *þvām*, I § 473. 2 p. 349). O.C.Sl. *mę tę sę*, Pruss. *mien tien sien sin* (*ie* and *i* represent a closed *ē*). But Lith. has *manę̀ tavę̀ savę̀* instead of **mę̀ *tę̀ *sę̀* (the vowel shortened according to I § 664. 3 p. 523) following the genitive (see § 450), for such original accusatives as **teu̯ēm *seu̯ēm* are hardly to be thought of; the dialectic *manį̀ tavį̀ savį̀* (Kurschat, Gramm. pp. 234 f.; Bezz. in his Beiträge X 310) follow the *i*-declension on the analogy of *manyjè manimì* etc. (§ 448).

**tŭ* as an accusative: Gr. Dor. τύ, O.Ir. *tū tu-ssu* (on the particle *-su* see p. 373 footnote) *friut* 'contra te' for **fri(th)-tu*, Goth. *þu-k* (= Gr. nom. σύ γε).

Remark. One observation may be made in connexion with *friut*. There has been in Irish a vast deal of levelling in phrases consisting of a preposition with a personal pronoun. The different pronouns, the different cases (acc. and dat.), and the different prepositions have influenced each other. Thus, *u* in *liumm* beside *lemm limm* 'through me' (*le-* is the preposition as accented, pre-tonic it is *la-*) and in *friumm* beside *frimm* 'against me' (*fri-*) seems to have been taken from the 2nd person; perhaps before the law which affects final vowels had come in, these had formed an ending **-mu* following **-tu* (cp. gen. *mo mu* following *do du* § 450). Now since the acc. and dat. of the pronoun *I* (originally **-me* and **-moi̯ *-mei̯*) had early run into the same form, and since in the pronouns *we* and *you* the forms *-n* and *-b* (for **nes* and **-u̯es*) were from the very first acc. and dat. both, it can hardly cause surprise that we find *dom dam* = **do-mu* instead of **doim* = **do mi* 'to me' (*do* with the dat.), which would have been expected. In producing *liumm friumm* and the like, however, another word may have had some influence — *ocum* 'with me' (the preposition is *oc(u)-*), cp. *ocut* : *friut torut* (*tar* 'trans') *immut* (*imb* 'circa'), and others. (This is Thurneysen's suggestion.)

Umbro-Samnitic. Umbr. *tiom teio tio* tiu 'te' and Osc. *siom* 'se' are doubtless nom. acc. neut. of the possessive. This would be quite certain if Bücheler should prove to be right in regarding Osc. tiium and tiú as nom. ('tu'); his theory is attacked by Bugge, Altit. Stud. 32 f. We shall meet again with possessives representing personal pronouns, in other languages (see below, § 452). It remains a question whether *tiom siom* are to be regarded as ad-formates of **miom* = Lat. *meu-m* (the Author, Kuhn's Ztschr. XXVII 403 f.), or whether beside Ital. **mei̯o-* there were original stems **tei̯o- *sei̯o-*, which the Umbro-Samnitic branch preserved along with *tovo-sovo-* (Torp, *op. cit.* p. 28).

§ **443.** *We* and *you*, and the plural forms of the Reflexive. Two distinct expressions for 'nos' 'vos' may claim to be considered original:

1. Forms from **ne- *no-* and from **u̯e- *u̯o-* ending in *-s* (§ 436 p. 367), in three different grades of ablaut. These

forms had at first no special accusative meaning, as their wider use in different branches of Indo-Germanic clearly shews. Their use for the nominative, however, is doubtless later than the break-up of the parent speech, and belongs to the special Latin and Keltic periods, see § 441 p. 375.

a. Avest. *nå vå* = pr. Ar. **nās *vās*. Lat. *nōs vōs*, also nom.; this nom. use may have begun in proethnic Latin, when the nom. pl. of noun *o*-stems still ended in **-ōs* and their accusative ending **-ons* had become **-ōs* too. Cp. also O.C.Sl. gen. loc. *nasŭ vasŭ* for **nās-sŭ *vās-sŭ* (§ 448).

b. Skr. *nas vas*, Avest. *nō vō*, also used as dat. and gen. O.Ir. *ni s-ni* 'nos', *si-ssi* 'vos' (when originally enclitic, these have become *-n* and *-b*), Cymr. Corn. Bret. *ni ny* 'nos', Cymr. *chwi* Corn. *why* Mid.Bret. *hui* 'vos' doubtless for pr. Kelt. **nes* and **s-u̯es*, cp. § 436. 3 with Rem. 3, pp. 368 f.; these forms are also used as nom. Goth. *izvis* O.Icel. *yðr* 'vos' pr. Germ. **i-z-u̯iz* = **e-s-u̯es*, cp. *ibid.* These forms are also used as dative, like O.H.G. *iu* A.S. *eów* for **i-u̯u̯iz* = **e-u̯es*. The last syllable of Goth. *izvis* retained *i* under the influence of *mis sis* or perhaps because of an accentuation *izvís*.

c. Goth. *uns*, O.Swed. *ōs ūs* for **n̥s*; these forms are also used for the dative, like the corresponding O.H.G. *uns* A.S. *ūs*. On the analogy of *izvis yðr* and also of the dative *mis* etc., were produced the acc.-dat. Goth. *unsis* O.Icel. *øss*, whilst the acc. O.H.G. *unsih* A.S. *ūsic* (like *iuwih eówic*) followed the analogy of *mih mec* etc. (cp. Armen. *z jez* 'vos' following *z ḱez* 'te').

The Balto-Slavonic accusatives come from the forms **nōs *u̯ōs*, which followed the analogy of the acc. plural of nouns and of pronouns with gender. That **nōs *u̯ōs* were proethnic in the Balto-Slavonic branch is proved by O.C.Sl. *nasŭ vasŭ* etc. (§ 448). Prussian *mans* 'nos', for **nans* at the first step backwards (it follows the nom. *mes*), and *wans* 'vos'. Similarly, Old Church Slavonic *ny vy*, like

rąky vlŭky (§ 326 p. 226, § 327 p. 229); like *rąky*, these forms (with a change of *ny* to *my*) are also used for the nom., see § 441 p. 375; they were also used for the dative, because of the acc. dat. dual *na* and *va* (§ 457). Lithuanian *jùs* 'vos' beside nom. *jũs* following *súnūs* : *súnus*, also dial. gen. *junə-dvijunə* following *sūnunə*; on the analogy of *jùs*, a form for 'us' answering to the Pruss. *mans* was transformed into *mùs* (§ 437. 2, *c* p. 370).

2. Pr. Idg. **ṇs-sme *us-sme*, differing from the formation described under 1. *c.* only in having a particle **sme* added to it. See § 436 with Rem. 2 pp. 367 f. Gr. Lesb. *ἄμμε ὔμμε* Boeot. Dor. *ἁμέ* Boeot. *οὐμέ* Dor. *ὑμέ*; with the ending pluralised Ion. Att. *ἡμέας ἡμᾶς*, *ὑμέας ὑμᾶς* (cp. nom. *ἡμεῖς ὑμεῖς*) and *ἧμας ὗμας* (cp. nom. Dor. *ἁμές ὑμές*). Avest. *ahma*; Skr. *asmán yuṣmán* following the acc. plural of *o*-stems. Since Avest. *ahma* can be derived, if need be, from pr. Ar. **asmā*, the question arises whether there was not an assimilation to *mā tvā* in pr. Aryan (cp. abl. Skr. *asmád* : *mád*); or there may even have been pr. Idg. doublets **ṇ(s)sme *ṇ(s)smē*, **u(s)sme *u(s)smē*.

Distinct from all accusative forms hitherto cited are Armen. *z mez* 'nos' *z jez* 'vos'. These are modelled after **z in-j* (*z is*) 'me' and *z ke-z* 'te', like as O.H.G. *unsih iuwih* after *mih di-h*.

Reflexive. Gr. *σφέας σφᾶς* beside *σφέ* like *ἡμέας* beside *ἐμέ*. Armen. *iureans*.

Ablative.

§ **444.** Ablative Forms with *-d* in Aryan and Italic.

Skr. *mád tvád*, Avest. *maþ þwaþ*, O.Pers. *ma* and reflexive *ša* (§ 438. 3 p. 371). Lat. *mē(d) tē(d) sē(d)*; Umbr. *sei-podruhpei* separatim utroque' *se-pse* 'singillatim' (cp. Lat. acc. *sē-pse* 'sese, semet'). Lat. *sĕ-d* conjunction, = O.Pers. *ša*. It is doubtful whether there were Idg. doublets **med* and **mēd* etc., or whether in pr. Italic **mĕ-d* etc. lengthened the vowel (*ē*) on

the analogy of the accusative, impelled also by the other ablative forms which had a long vowel followed by *-d* (*-ēd -ōd*, *-ād*, *-īd*): Lat. *sĕd* kept clear of these influences by its isolation in point of meaning. There is the same doubt in Avest. *maibyā* : *mā-vya* § 445 p. 381.

Skr. *asmád yuṣmád*, Avest. *ahmaþ yūšmaþ xšmaþ*. These might be considered Idg. if it were certain that the post-Homeric *ἡμεδαπό-ς ὑμεδαπό-ς* 'born in our or your land' are anything more than mere adformates of *ἀλλοδ-από-ς* and the like (II § 32 p. 56).

We seem to be justified in inferring from Skr. *mad-ī́ya-s* 'my' *asmad-ī́ya-s* 'our' *mát-sakhi-ṣ* 'my comrade' and the like (Whitney, Skr. Gr. §§ 494, 1098) that the *d*-formation had originally a wider signification. The *-d* has often been identified with *-d* in the nom. acc. sing. neut. of pronouns with gender (Lat. *quo-d qui-d*).

The following are obscure: Armen. abl. *y inēn* (perhaps *inēn* and instr. *inev* instead of **imēn *imev* following *inj*, as Lat. *vēnī* Osc. kúm-bened have *n* instead of *m* because of *-ventu-s venio*, cp. I §§ 207, 208 pp. 174 f.) *i kēn* and *i mēnj̆ i jēnj̆* (for *-j̆*, cp. the loc. *i telvoj̆* abl. *i telvoj̆ē* gen. dat. *knoj̆* abl. *i knoj̆ē*). Compare Torp, *op. cit.*, 27.

Forms with adverbial suffixes (cp. § 244 pp. 141 ff.). Skr. *mat-tás tvat-tás asmat-tás yuṣmat-tás*, compare above, *mad-ī́ya-s* etc. Gr. *ἐμέ-θεν σέ-θεν ἕ-θεν*, used also for the gen., because there was a confusion of gen. and abl. elsewhere (§ 244 Rem. 2 p. 143).

Dative.

§ **445.** Skr. *máhyam*, Ved. this and *máhya*, Armen. *inj* for **imj* = **emeĝh-* and Lat. *mihī* Umbr. *mehe* point to an Idg. ground-form with **(e)meĝh-*, where *ĝh* (the same as *ĝh* in the nom., Skr. *ahám* etc.) took the place which *bh* held in the *bh*-suffix of 'tibi'. The case-ending of the Idg. form cannot be made out, because assimilation has taken place with

the ending of the *bh*-suffixes. Avest. *maibyā māvya* (for the *ā* of this form, see below) *maibyō* show a still more thorough-going assimilation to the 2nd person.

Skr. *tú-bhyam*, *asmá-bhyam*, *yuṣmá-bhyam*, in Vedic also forms with *-bhya*. Avest. *taibyā taibyō*, *ahmaibyā*, *yūšmaibyā xšmaibyā xšmā-vya yūšmaoyō* (= **-a-vyō*, I § 160 p. 144), *hvā-vya*. First as regards the stem: Avest. *taibyā* seems to be more ancient than Skr. *tú-bhya(m)*, cp. Umbr. *te-fe* O.C.Sl. *te-bě*; *túbhya(m)* may have got *u* from *tuvám tuvā́m tuvā́*, cp. Goth. *þus* following *þu-k* (*þu*). The *ā* of *hvā-vya xšmā-vya*, and *mā-vya* mentioned above, is uncertain. It may be an Iranian re-formation instead of *a* (cp. acc. *maṃ mā*, and possibly *ahma* = pr. Ar. **asmā* § 443. 2 p. 379, *ahmākem*); or there may have been doublets for 'mihi', 'tibi', 'sibi' in pr. Idg., one with *e* and the other with *ē*, and these may have occasioned a variation in quantity in the forms of *ahma-yūšma-*; but which, can no longer be made out. The same doubt meets us in Lat. *se-d sē-(d)*, § 444 pp. 379 f. The suffixes Ved. *-bhya* Avest. *-byă* are to be compared with Gall. *-bo* § 367 p. 267. Skr. *-bhyam* has the *m*-particle. Avest. *-byō* was first produced in **ahmaoyō* and **yūšmaoyō*, to mark these cases as plural (it is true that these particular forms are not found in the Gāthā dialect), and on this analogy *maibyō taibyō* (cp. § 437 Rem. 2 p. 369).

Very closely connected are Lat. *ti-bei ti-bī si-bei si-bī* (it is simplest to explain *i* in the first syllable as due to the use of the word without an accent, cp. *plicō igitur* and the like I § 65 Rem. 2 p. 53, § 679 p. 546), Umbr. tefe *tefe* 'tibi' Osc. sífeí Pelign. *sefei* and Pruss. *te-bbei se-bbei*; Lith. *távei sávei* (Schleicher in Kuhn-Schl. Beitr. I 238, *mánei* Leskien-Brugmann Lit. Volksl. p. 49 n. 83) with *-av-* instead of *-eb-* following the gen. *tavè savè*. These forms show after *-bh-* the ending of the Idg. loc. dat. gen. **meḭ* **t(u̯)eḭ* **s(u̯)eḭ* (§ 447), and that of the Ital. loc. dat. of pronominal *o*-stems with gender, as Osc. alttreí 'in altero' *altrei* 'alteri' (§ 424 p. 348). Difficulties are suggested by the variety

of the forms found in Lithuanian dialects: we have not only *-ei*, but *manë tavë savë* (cp. Bezzenberger, in his Beitr. XV 301) like *namẽ* (§ 263 p. 166), *máni távi sávi* like *mi ti si* (§ 447, but compare Bezzenberger as cited), and further *mán mą́, táv táu, sáv sáu.* Even in the oldest Lithuanian these datives, which were originally locative as well, underwent certain changes due to their locative use on the analogy of the locative of substantives. O.Lith. *taweie* like *dieweie*, modern *tavyjè* like *naktyjè* etc. (cp. § 263 p. 166, § 448). O.C.Sl. dat. loc. *te-bě se-bě*, where *-bě* cannot be derived from **-bhei̯*, may be of the same class as **moi̯ *t(u̯)oi̯ *s(u̯)oi̯*, the doublets of **mei̯* etc. (see § 447), cp. loc. *vlŭcě* = **u̯lqoi̯* § 263 p. 166; on their relation to the instrumental, *tobojǫ sobojǫ*, see § 449. We might therefore call **tebhei̯* and **tebhoi̯* a compromise between a form like the Avestic *taibyā* and those shorter loc. dat. forms in *-ei̯* and *-oi̯*. It is also quite possible that the parent language had at the same time **meĝhei̯ *meĝhoi̯* (Lat. *mihī*) and **te-bi̯o *se-bi̯o* or like forms (Avest. *taibyā hvā-vya*), and that these were assimilated in different directions by the various languages: Skr. *máhyam* instead of **mahē* following *túbhyam*, Lat. *tibei* instead of **tebie*, or the like, following *mihei* etc.

Lat. *nōbīs vōbīs*[1]) cannot be derived from such ground-forms as **nŏz-bh- *u̯ŏz-bh-*, since *-zbh-* would have become *-sp-*. In any case *-bīs* was coined as plural complement to *-bī* on the analogy of the endings of *istī* : *istīs*. Either the forms were new-cast to match with the plural *nōs vōs*, or they are dual forms (orig. *nō-b- vō-b-*) which have received the mark of the plural in the suffix only (cp. § 458).

Pruss. *mennei* Lith. *mánei* (*máni* etc.) O.C.Sl. *mĭně* with *-n-* following the gen. Lith. *manè* O.C.Sl. *mene* (§ 450). Pruss. *nou-mans nou-mas iou-mans iou-mas* Lith. *mù-ms jù-ms*, O.C.Sl. *na-mŭ va-mŭ* with the noun-suffix of the

1) Pelign. *vus* 'vobis' for **vō-fs* is doubtful; Bugge, Altit. Stud. 75, 77.

dative plural (§ 367 pp. 267 f.). One reason why these forms, like the instr. O.C.Sl. *nami vami*, had no *s* before the case-suffix, while there was one in the gen. and loc. pr. Balt.-Slav. **nōs-sŏm *u̯ōs-sŏm* and **nōs-su *u̯ōs-su* (§ 448), was that the corresponding dual cases had none (Lith. *mum jum* O.C.Sl. *nama vama*, § 458), and they influenced the form of these; *-s-* in *-sm-* could not properly have been dropped (I § 585. 2 p. 301). In Baltic, **i̯ū-* came from the nom. and drove out **u̯ō-*, and then in Lithuanian the analogy of the *u*-stems came in, as with *jùs* and *jumìs*; for the other changes in the stem see § 437. 1, *a* and 2, *c*, pp. 369 f. Lith. *mù-ms*, *mu-mìs* served as the foundation for the dialectic locative *mumyse* instr. *mumim(s)* acc. *mumis*, cp. dual gen. *mumu* etc. § 458.

§ **446**. Armen. *inj* is to be connected with Skr. *máhyam* Lat. *mihī*, as we saw in § 445 p. 380. Its ending spread to the other pronouns, whence *ḱez* 'tibi' *mez* 'nobis' *jez* 'vobis' (for the interchange of *-j* : *-z* see I § 410 p. 301), the reverse of what took place with Avest. *maibyā*, which follows *taibyā*. Reflexive: sing. *iu-r* plur. *iureanç*, like the gen., see § 455.

The Germanic forms with *-s* Goth. *mis þus* (doubtless for **þis* following *þuk*, cp. Skr. *tú-bhyam* § 445 p. 381) *sis*, O.H.G. *mir dir*, A.S. *me mē đe đē* (for the phonetics, see Sievers Ags. Gr.[2] § 121, Behaghel Germania XXXI 381), O.Icel. *mēr þēr sēr*, are all doubtless ad-formates of **nes* 'nobis' **u̯es* 'vobis'; outside of the Germanic dialects these are represented only by Skr. *nas vas*, Avest. *nō vō*, and by O.Ir. *-n -b* for **nes *s-u̯es* (e. g. *uain* 'a nobis' *uaib* 'a vobis'), and the latter, **u̯es*, is contained in other Germanic words, Goth. *izvis* O.H.G. *iu* A.S. *eów*, while **nes* is only represented by Goth. *uns*, which comes from **n̥s*, an Idg. doublet of **nes* (§ 443 p. 378). Perhaps the form first produced was *sis* (plural and singular), which was followed by *mis* and **þis*. Compare Gr. ἐμίν following ἄμμιν § 448.

The Possessive used for the Personal Pronoun: Avest.

ahmāi, related to Gr. loc. ἄμμιν as Skr. *tásmāi* to *tásmin*; see §§ 448, 452.

Locative.

§ **447.** Forms in *-i*, which had at the same time the function of the dative and of the possessive genitive: **me̯i̯ *t(u̯)e̯i̯ *s(u̯)e̯i̯, *mo̯i̯ *t(u̯)o̯i̯ *s(u̯)o̯i̯*. These are very closely connected with pr. Ital. **alt(e)rei̯*, which was loc., dat., and gen. all at once (see § 419 pp. 341 f., § 424 p. 348). They may be fairly derived from the possessive stems **mo-* etc. (cp. § 452).

Skr. loc. Ved. *mé tvé*, dat. gen. *mē tē* Prākr. *sē* (*sē* in Vedic also? a very questionable point, see Bartholomae, Stud. zur idg. Spr. I 114), Avest. loc. *þwōi*, dat. gen. *mę̄ mōi, tę̄ tōi, hę̄ hōi šę̄* (§ 438. 3 p. 371), O.Pers. dat. gen. *maiy* dat. *taiy*. Skr. *mē tē* in Vedic are probably used for the accusative also (Delbrück, Synt. Forsch. V 205 f.); this wider use may be due to the wider use of *nas vas* and *nāu vām*; compare Lith. *mi ti* (p. 385), and Gr. τίν ἑίν (p. 387), all used for the accusative.

Gr. loc. dat. ἐμοί μοὶ, σοί for *τϝοι beside pr. Gr. τοὶ (now a particle), ϝοῖ οἷ οἱ (we may conjecture, for pr. Gr. *σϝοι and *σοι, although there are no certain grounds for believing in the latter, cp. the Author, Gr. Gr.[2] p. 134), Hom. has these and also ἑοῖ i. e. *σεϝοι. These datives are found often in the poets with the sense of a possessive genitive, as β 50 μητέρι μοι 'matri meae' like Skr. *mē gíraḥ* 'hymni mei', σ 68 φάνεν δέ οἱ εὐρέες ὦμοι.

Lat. *mī* dat. beside *mihī*, used as a possessive genitive in *mī fīlī, anime mī, mī domina, mī hospitēs* and the like; the so-called vocative *mī* is always derived from **me(i̯)e* (the latest supporter of this is Thurneysen, Kuhn's Zeitschr. XXX 500), but this cannot be supported by what is known of the phonetic laws. The gen. *mī* and **tī* served as bases for the O.Lat. gen. *mīs tīs*, which were formed by adding *-s* or *-es* on on to them (cp. *istīus* = **istei̯ + os* § 419 p. 341,

and Dor. ἐμέος instead of ἐμέο (§ 450). To the same group belongs *sei sī*, now a conjunction. Umbrian gives us *se-so* 'sibi', since its final portion must surely be an affixed particle (cp. the Irish "particulae augentes" or intensive particles, *-su -sa -som*). And further, two other forms from the same dialect, sve-su and *sve-so*, in which *sve-* is certainly a poss. gen., may contain the same particle *-so* as *se-so* 'sibi' does, or we may assume for them an inflected stem *sve-so-*, with Bücheler (Bücheler takes sve-su in I *b* 45, II *a* 44 as 'suum', and *sveso* in VII *b* 1 as abl. 'suo'); if the latter be correct, we have a combination of the poss. gen. with *so-* 'suus' (O.Lat. *su-m sa-m sōs*), cp. Lat. *suo sibi gladio hunc iugulo*, O.C.Sl. *pisachą svoją si rěčĭ* scribebant suam linguam' and the like (the Author, Ein Problem der hom. Textkr., 132 ff.).

O.Ir. *-m -t*, e. g. *uaim* 'a me' *uait* 'a te'.

Lith. dat. and acc. unaccented *mi ti si* (in the first instance for **mĕ* etc., according to I § 664. 3 p. 523), e. g. *saugók-mi* 'preserve me' *sùka-si sùka-s* 'se' and 'sibi torquet'; and compare Pruss. *-si*, e. g. (*sien*) *grīki-si* 'they fall into sin' (reflexive), beside *-sin* = *sien* (*-si* = **-sē*?). Its use for the accusative is secondary, cp. Ved. acc. *mē tē* on page 384, and Gr. acc. *τίν ἑίν* on pages 386—7. (It is not permissible to assume that the acc. Lith. *mi* comes from **me* = Gr. *μέ*). O.C.Sl. unaccented *mi ti si*, dat. and possessive (the so-called "possessive dative"), as *drugŭ mi* '*φίλος μου*'.

Other locative forms in *-i*:

Skr. Ved. *asmé yuṣmé*, also used for dat. and gen. (cp. Delbrück, Synt. Forsch. V 206 f.), doubtless represent the Idg. ground-forms. Further, Skr. *máyi tváyi* beside Ved. *mé tvé*, which are due to a desire to mark the forms more distinctly as locative, and so to distinguish them from the dat. gen. (acc.) *mē tē*; *máy-i* : instr. *máyā* following *dhiy-í* : *dhiy-á*, and the like (Wackernagel, Kuhn's Zeitschr. XXVIII 138).

O.C.Sl. *mĭně tebě sebě*, see § 445 p. 382.

§ **448.** Lith. *manyjè tavyjè savyjè* like instr. *manimì* etc. following the *i*-class.[1]) Compare § 445 p. 382.

Skr. *asmásu yuṣmásu*, instead of *asmé yuṣmé*, were made in connexion with the instr. *asmá-bhiṣ yuṣmá-bhiṣ* on the analogy of *áśvā-su* : *áśvā-bhiṣ*. Instead of these, Pali and Prakrit have *amhesu tumhesu* on the analogy of pronouns with gender and of noun-stems in *-o-*.

O.C.Sl. *nasŭ vasŭ*, O.Lith. and modern dialects *mūsŭ jūsŭ* (as to *mū- jū-* instead of pr. Balt.-Slav. **nō- *-u̯ō-*, see § 437. 1, *a* and 2. *c*, pp. 369 f.), come from pr. Balt.-Slav. **nōs--su *u̯ōs-su*, as the gen. O.C.Sl. *nasŭ vasŭ* Pruss. *nouson iouson* Lith. *músū júsū* from **nōs-sŏm *u̯ōs-sŏm*. We may conjecture that **nōs *uōs* in pr. Balt.-Slav., besides being acc. (§ 443. 1, *a* p. 378), were also gen. (cp. Skr. acc. gen. *nas vas*), and then on the analogy of Pruss. *stei-son* O.C.Sl. *tĕ-chŭ* added the ending **-sŏm*, in the same way as Gr. ἐμε, used for the genitive, was extended to **ἐμε-σμο ἐμεῖο* (§ 450), Skr. *mé*, once locative, to *máy-i* (§ 447), and Lat. **isteḭ* in its genitive use to **isteḭ-os istīus* (§ 449 p. 388); there are others of the same kind. The new genitive formation then produced a locative on the analogy of O.C.Sl. *tĕ-chŭ*. The Lithuanian locative forms suffered many changes, since as the case-system developed they lost their distinctness, and by that time the locative of nouns helped them no whit: O.Lith. *musuie iusuie* (cp. *sūnŭjè*), later *mūsyjè jūsyjè* (cp. *manyjè* etc.), *mūsimè jūsimè* (cp. *szimè*), *mūsûsè jūsûsè* (: *músū* = *vilkûsè* : *vilkū*).

Greek, with its endings *-ιν -ι* and *-ῑν*, stands quite by itself. Dor. *ἐμίν ἐμί̄ν τίν τί̄ν*, Tarent. *ἐμίν-η τίν-η* (cp. *ἐγών-η*), Hom. *τείν* for **τεϝιν*, Gort. *ϝίν*, Boeot. *ἐίν* for **σεϝιν*.

1) This re-formation is not, as is often stated, due to any assimilation of *mánei* to *ãkei*; for the latter is *ãkiai*, cp. § 249 p. 152. But O.Lith. *manėje tarėje*, if ever there were such forms (Leskien Decl. 141, Bezzenberger Beitr. zur Gesch. der lit. Spr. 161) may have been made alongside of *mánei* on the analogy of *žẽmėje* : *žẽmei*; cp. Brückner, Arch. slav. Phil. IV 17.

Lesb. ἄμμιν ὔμμιν, Dor. ἆμιν ἁμίν ἁμῖν ὖμιν ὑμίν, Ion. Att. ἡμιν ἡμῖν ὑμιν ὑμῖν, Hom. also ἡμῖν ὑμῖν; the retrograde accent in these forms (except the Lesbian) is a substitute for enclisis (I § 676 pp. 544 ff.). Without *-ν*, Lesb. Hom. ἄμμι ὔμμι. It is natural to suppose that there is a connexion with the forms examined in §§ 423 f. pp. 346 ff., as Skr. *tásmin* Avest. *aẹtahmi* Gr. ὅ-τῑμι. The relation of **n̥s(s)mi *n̥s(s)min *us(s)mi *us(s)min* = ἄμμι ἄμμιν ὔμμι ὔμμιν to **n̥s(s)me *us(s)me* = ἄμμε ὔμμε is the same as that of **tesmi *tesmin* = Avest. *aẹtahmi* Skr. *tásmin* to **tesme* = Lith. *tamè* (instead of **tesmè*); and further, ἄμμιν is to Avest. *ahmāi* as Skr. *tásmin* to *tásmāi*. Since it is only in *-smin* that proof has so far been shown for *-in* as an Idg. locative suffix,[1]) I hold ἄμμιν ὔμμιν to be older than ἐμίν τίν ϝίν. The analogy of ἄμμιν : ἄμμε suggested ἐμίν beside ἐμέ, and so with the others. Perhaps σ-φίν, used for both sing. and pl., helped in this; viewed in conjunction with ἄμμιν it would be analysed as σφ-ίν (§ 438 p. 371, § 449), that is to say if its association with ἄμμιν ὔμμιν was earlier than the existence of ἐμίν τίν ϝίν; cp. pr. Germ. **þiz* 'tibi' on the analogy of **izviz* 'vobis' (§ 446 p. 383), and § 437 Rem. 2 p. 369. But this does not explain the ῑ of ἡμῖν ἐμῖν etc.

Remark. One possibility — not the only one — is that the deictic particle -ίν became attached to *ἀσμι (cp. οὑτοσ-ίν beside οὑτοσ-ί). Cp. Dor. ἐμε-ῖ τε-ῖ, and Cypr. μι 'me' (Meister, Gr. Dial. II 211) which may be regarded as μ'ι. Then the difference in the meaning of *ἄσμιν and *ἀσμῖν *ἀσμι will have faded away afterwards.

The forms τίν and ἕίν are also found with the meaning of the acc., which seems to have come about from the analogy of μὶν νὶν (and cp. χάριν βάσιν etc.). Compare too Ved. *mē tē* and Lith. *mi ti si* as accusatives, § 447 pp. 384 f.

1) All that Bartholomae brings forward in Bezz. Beitr. XV 18 is extremely uncertain. On πρίν πρεῖν see II § 135 p. 430. Even Avest. *þwī*, cited by Bartholomae Ar. Forsch. III 28, does not obviously vitiate my view of the origin of τίν τεῖν.

With plural ending added: Lesb. ἄμμεσιν, similar to σφί-σι § 449.

The Instrumental.

§ 449. Skr. *máyā tváyā*, Ved. these and *tvá tuvā́*. The history of *máyā tváyā* is doubtful. They may have been formed in connexion with *mā́m tvā́m* on the analogy of *áśvayā* : *áśvām* (cp. *asmásu* beside *asmā́bhiṣ* following *áśvāsu* : *áśvābhiṣ*, § 448 p. 386); or perhaps they come from the possessive stems **meio-* **tueio-* (cp. Lat. *meu-s* O.C.Sl. *tvojĭ*). Ved. *yuṣmā́-datta-* 'given by you' like *tvā́-datta-*; by adding to **asmā́ yuṣmā́* the instr. pl. suffix we have *asmā́-bhiṣ yuṣmā́-bhiṣ*. Skr. *tvā́ yuṣmā́* may be derived from the possessive stems **tuo-* **(i)u(s)smo-*, like *tvḗ* etc., § 447 p. 384. In Avestic, personal pronouns dropped the instrumental case (Bartholomae, Ar. Forsch. II 127).

Armen. *ine-v* (instead of **ime-v* following *inj*? cp. § 444 p. 380). *ke-v*, *me-vk̆ je-vk̆*. Reflexive sing. *iure-v*.

Gr. σ-φίν and σ-φί. On the case-suffixes see § 281 pp. 186 f., on the stem, § 436 Rem. 3 p. 368. From σφί was formed a plural σφί-σι, as Skr. *yuṣmā́-bhiṣ* from *yuṣmā́*, and others.

Lith. *manimì tavimì savimì* following the *i*-class, like the loc. *manyjè* etc., § 448 p. 386; in dialects also *manì tavì savì* like *akì* (§ 278 pp. 181, 183). O.C.Sl. *mŭnoją toboją soboją* were made beside the loc. dat. *mĭně tebě sebě* (§ 445 p. 382) to match with *rąkoją* : *rącě*. Lith. *mu-mìs mu-mì*, *ju-mìs ju-mì* O.C.Sl. *na-mi va-mi* like dat. *mù-ms jù-ms na-mŭ va-mŭ*, § 445 pp. 382 f.

Pruss. *sen maim* 'mecum' is properly 'cum meo' (§ 421 p. 344), cp. gen. *maisei* § 452.

The Genitive, and the Possessive Adjectives.

§ 450. From the original language and onwards there has been a very close connexion between the genitive case of pronouns and their possessives. The possessives were for the most part built up on forms which were used with a genitive meaning; and here all will be treated together.

I. Idg. **eme *teu̯e *seu̯e*, the bare stem, like acc. sing. Gr. *ἐμέ* etc. Beside **eme* there was another stem **me-ne*, whose ending recals Skr. *ca-ná* Avest. *ka-na* (§ 421 p. 344) and the like; compare Torp's hypothesis mentioned already, § 435 Rem. page 366.

Armen. *im*. Avest. *ma-na* O.Pers. *ma-nā*; Cymr. *my n-*; Lith. *manè* (instead of **me-nè* on the analogy of *tavè savè*) Pruss. **me-ne* (inferred from dat. *mennei*), O.C.Sl. *me-ne*.

Skr. *táva* Avest. *tava* (the Avest. possessive *hava-* comes from pr. Ar. **sava*, § 451); Armen. *k̑o*, which doubtless began originally with *t-* (*d-*), but took *k̑-* = **tu̯-* from the other cases, — in other respects the word is treated like *nor* 'new' (II § 75 p. 192); Mid.Cymr. *teu* (pr. British **tou*), O.Ir. *do du* first from **tou *tō* with accent (on the variants *do-* and *t-*, *do-māthir* and *co-t-māthir*, see vol. I p. 551); Lith. *tavè savè*, O.C.Sl. *tebe sebe* instead of **tove *sove* on the combined analogy of *tebĕ sebĕ* and *mene*.

Sanskrit *máma* is either *ma* reduplicated (cp. *tvá-tvam* and the like, II § 54 p. 100), in which case we must assume Idg. **me* as well as **eme* (cp. Avest. *ma-*, § 451); or it was **ama* = Armen. *im* transformed by the analogy of *mā mḗ*. Compare the Author, Kuhn's Zeitschr. XXVII 401; Torp. *op. cit.* 20 f.; Wackernagel, Kuhn's Zeitschr. XXVIII 138.

In Greek the genitives were extended by *-σι̯ο*, **ἐμε-σι̯ο* etc., which served to keep them distinct from the accusative. *ἐμεῖο ἐμέο ἐμεῦ ἐμοῦ μευ μου, σεῖο σέο σεῦ σοῦ, εἷο ἕο εὗ οὗ*. Then again *-ς* was added, producing such genitives as Dor. *ἐμέος ἐμεῦς, τέος τεῦς*.

The formation of these Greek genitives seems to throw light on Armenian *k̑o-y*, gen. *k̑oyoy*, 'tuus'. It is possible that the kernel of this is *k̑o*, explained above; this would be extended to **k̑o-y*, and from this would grow out the possessive *k̑oy* in exactly the same way as the possessive *imo-* was made from *im* (§ 451). But it is also possible to regard the kernel of this word as being the gen. **tu̯o-si̯o*, i. e. the gen. of the

possessive which had taken the place of the original substantival genitive (§ 452).

Latin *meī tuī suī* and Lithuanian *mãno tãvo sãvo* (also accented *màno tàvo sàvo*) are obscure. We cannot tell whether they are direct transformations of the pr. Idg. gen. of substantival personal pronouns, or whether they were originally gen. of the possessive pronouns (Lat. *meu-m* etc., Lith. *mãna-s* etc.) which at a late period took the place of these; Lat. *nostrī vestrī* are undoubtedly possessives.

In Keltic the pronouns of the 1st and 2nd persons influenced each other's form. In Irish we see *mo mu* following *do du* (cp. O.Ir. *friumm* following *friut* § 442 Rem. p. 377), and similarly in Mid.Cymr. *meu* following *teu*. On the other hand it may be conjectured that Cymr. *dy* (pre-tonic) follows *my* (*n-*), cp. Bret. *da* and *ma* (but Corn. *đe* and *ow*).

In Balto-Slavonic, genitives of this class were the foundation for re-modelled forms in the other cases: Lith. *manę̃ mánei manyjè manimì, tavę̃* etc., Pruss. dat. *mennei*, O.C.Sl. *mĭnĕ mŭnoją*. Compare Prakr. acc. *mamaṃ* loc. *mamammi* abl. *mamādō* from the gen. *máma*, O.C.Sl. dat. *česomu* loc. *česomĭ* (beside *čemĭ*) from the gen. *česo* 'cuius'.

§ 451. The genitives mentioned in § 450 were inflected as *o*-stems to form possessive pronouns.

**eme- *me- *mene*: Avest. *ma-*, Armen. *im* gen. *imoy*,[1]) Gr. ἐμό-ς, Lith. *mãna-s* (with *a* in the first syllable on the analogy of *tãva-s sãva-s*).

**teu̯e- *seu̯e*: with the variants **tu̯e- *su̯e-*[2]) **se-*. Avest. *hava-*; Skr. *tvá-s svá-s* Avest. *þwa- hva-* O.Pers. *uva-*.

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1) Whether the nom. *im* is an unchanged *im* = Idg. **eme*, as in Old Saxon the gen. pl. *ūsa iwa* were used unchanged for the nom. sing. of the possessive (§ 455), or whether *im* once had a nominative sign, is a question which cannot be decided.

2) **su̯e* doubtless in **su̯é-sor-* 'sister' and **su̯é-k̑uro-* 'father-in-law'. Are we justified, on the strength of Mid.H.G. *swā-ger*, in assuming **su̯ē* as a variant of **su̯e* for Idg., like Skr. *mā* beside Gr. μὶ and the like?

Armen. *ḱo-* = **tu̯o-* in *ḱoy* 'tuus', see § 452. Gr. *τεό-ς ἑό-ς*; *σό-ς ϝό-ς ὅ-ς*; pronominal flexion is clear in the adv. **ϝοδ* in *ὅττι ὅππως* etc. (§ 417 p. 338), cp. pron. flexion in Aryan, as Ved. *svá-smin* Avest. *ma-þ þwa-hmī*. Lat. *tovo-s tuo-s sovo-s suo-s*, Umbr. *tover* 'tui' Osc. tuvai dat. '*tuae*' Osc. *soveis* 'sui'; O.Lat. *su-m sīs sa-m* and perhaps Umbr. *so-* in sve-su (§ 447 p. 385). Lith. *tãva-s sãva-s*.

Another class of possessives is formed with secondary suffixes, from genitives or from other forms:

Skr. *máma-ka-s māmaká-s tāvaká-s* (the two last are Vriddhi derivatives, cp. II § 60 pp. 112 f.) from *máma táva*, see II § 86 p. 257. *mad-ī́ya-s tvad-ī́ya-s* from *mád tvád* (cp. § 444 p. 380), see II § 63 p. 133.

Two explanations are possible of Latin *meu-s* for **mei̯o-s* (on *miīs* = *meīs* and the like see Thurneysen, Kuhn's Zeitschr. XXX 500), Pruss. *mais*, acc. pl. *maia-ns*, *twais swais*, O.C.Sl. *mojĭ tvojĭ svojĭ*. They may contain the suffix *-i̯o-*, like O.C.Sl. *našĭ vašĭ* for **nās-i̯o- *u̯ās-i̯o-* (see II § 63 pp. 132 f.); or, as is assumed by Lidén (Ark. nord. fil. III 242) and Johansson (Bezz. Beitr. XIV 171, XVI 135), the possessives **mei̯ *moi̯* (§ 447 pp. 384 ff.) were attracted to the *o*-class and became **mei̯o- *moi̯o-*. On the last view, compare O.H.G. Frank. *uns-a-* O.Sax. *ūs-a-* Pruss. *nous-a-* 'our' and the like, § 454. I leave the matter undecided.

O.Ir. *mui* 'mine' (all genders), **tui* (Mid.Ir. *tāi*) 'thine' (all genders) are modelled upon *ai ae* 'his', used for all genders (p. 339, footnote). In this statement I follow Thurneysen.

As before, two origins are possible for Gothic *mein-s þein-s sein-s* O.H.G. *mīn dīn sīn*, and I leave the question open. They may have the Suffix *-īno-* (II § 68 p. 158), or, as Lidén assumes (*loc. cit.*), they may be the possessive **mei̯* etc. + the suffix *-no-* (cp. Skr. *purā-ṇá-* 'former' and the like II § 66 pp. 142 ff.). In favour of the former view might be adduced Lith. *kënõ* 'whose' from a form *këna-* 'belonging to whom', which seems to contain *-ëna-*, a suffix very closely related to *-īno-* (II § 68 p. 160). But some dialects show

kenō (*kanō*) (the Author, Lit. Volksl. 304), which resembles the variation of Skr. *kéna* and Avest. *kana* (§ 421 p. 344); cp. Johansson, Bezz. Beitr. XVI 158.

§ **452.** We have often noticed that instead of 'ego, 'tu', and so forth the equivalents of 'meum', 'tuum', etc. were used, substituting for the idea of personality the more concrete expression denoting what belongs to the person and makes up his environment. Thus we find Umbr. *tiom* 'te' § 442 p. 377, Pruss. *sen maim* 'mecum' § 449 p. 388, Avest. *ahmāi* 'nobis' § 446 pp. 383 f., and perhaps Gr. Lesb. *ἄμμιν* 'nobis' § 448 p. 387. Such expressions as these came the more naturally because there were forms which could be regarded as either a subst. personal pronoun or a neuter possessive used as a subst.; for example, loc. Skr. *tvé* (cp. *své* 'in suo').[1])

Thus it may be seen how the genitive of the possessive often came to be used instead of the gen. of the personal pronouns. Gr. *τεοῖο τεοῦ ἑοιῶ ἑοῦ* from *τεό-ν ἑό-ν*, and with *-ς* added (cp. *ἐμέο-ς* § 450 p. 389) Dor. *τεοῦ-ς ἐμοῦ-ς* Boeot. *τεῶ-ς τιῶ-ς* (the Author, Kuhn's Zeitschr. XXVII 407 f., 414 ff.). Pruss. *maisi twaisei.* Possibly of this sort are Armen. **k̔oy*, the kernel of *k̔oy* 'tuus', and Lat. *meī tuī suī* Lith. *mãno tãvo sãvo* (see § 450 pp. 389 f.). The suggested derivation of these Lith. forms from *mãna-* 'meum' etc. is supported by *kënō* 'whose', if it is derived from a poss. adj. *k-ëna-* (§ 451, above).

A case of the possessive may also be expected in Goth. *meina þeina seina* O.H.G. *mīn dīn sīn.* But which case is it?

Remark. Bezzenberger's view is that *meina* is ablative (Unters. über die got. Adv., 7): its ground-form would then be **mīnōd* or **mīnēd*, and it would answer to Lith. *mãno*, cp. § 228 p. 114, § 241 p. 135. Dr. K. Bojunga holds it to be the nom. acc. pl. neuter (cp. Skr. *asmáka-m*). Johansson, Bezz. Beitr. XVI 163 f., explains *meina* as **mei̯-nā-r*, which

1) However, it is still unknown in what way the adj. Skr. *sva-* and Avest. *hva-* 'own, my, thy, his' came to be used for the subst. pronoun, whence we have *svá-s hvō* 'he himself' *svā́* 'she herself'. This use must surely be a secondary developement. We might believe that the Idg. reflexive pronoun subst. (Gr. *ἑ* Lat. *sē* etc.) adopted the inflexion of the possessive, and in this way got a nominative case.

he calls "a loc.-instr. case with the meaning *by or with me*, or something of the kind; or, more precisely, a locative (*meḭ-moḭ-mĭ*), strengthened by an *n*-suffix (= *asmi-* : *asmí-n*, or, vice versa, *jmán* : *jmáni*)"; compare his view of *unsara*, in the volume cited above, pages 136 f.

§ **453.** On Armen. *iur* 'sui', see § 455.

Lith. *manę̃s tavę̃s savę̃s*, beside *manè tavè savè*, are still an unsolved problem; they recal O.C.Sl. *tojǫ rąky dušę* (§ 229 pp. 117 f., § 420 p. 343). There is another group, *manès tavès savès*, which look like an extension of *manè* etc. by *-s* similar to Gr. ἐμέο-ς (§ 450 p. 389), or a kind of compromise between *manè* and *manę̃s* etc.; another is *manës tavës savës*, coined for the benefit of *manimì manyjè* etc. Cp. Brückner, Arch. slav. Phil. IV 11 ff.

Lastly, the student must be reminded that forms like Skr. *mē*, locative in form, were originally possessives, and are still used as such in the separate languages; they may also be called possessive genitive. See § 447 pp. 384 ff.

§ **454.** II. If the acc. **n̥sme* (= Gr. ἄμμε) was a combination of the acc. **n̥s* (= Goth. *uns*) with the particle **sme* (§ 443. 2 p. 379), we might expect **n̥sme* to be sometimes used for the genitive, considering that Skr. *nas* can be so used. Then the Greek **ἀμμε-ῖο* **ὑμμε-ῖο*, later with plural suffix ἀμμείων **ὑμμείων* (Hom. ἡμείων ὑμείων ἡμέων ὑμέων, Att. ἡμῶν ὑμῶν, Dor. ἁμέων ὑμέων ἁμίων ὑμίων) bear the same relation to Idg. gen. **n̥sme* as ἐμε-ῖο to Idg. gen. **eme*. On the analogy of these genitives in *-είων* was formed σφείων σφῶν. We add as further examples the possessives Avest. *ahma-* Lesb. ἄμμο-ς ὔμμο-ς Dor. ἁμό-ς ὑμό-ς, and Avest. *ma-* Gr. ἐμό-ς.

A certain amount of support for this view may be had from the Balto-Slavonic and some Germanic forms. As has already been said (§ 448 p. 386), O.C.Sl. *nasŭ vasŭ* Pruss. *nouson iouson* Lith. *músū júsū* have doubtless been built up on **nōs* **u̯ōs* used for the genitive. These passed into the *o*-class, and gave rise to the poss. adj. Pruss. *nous-a-ious-a-* (masc. dat. *nousesmu* acc. *iousan*, fem. nom. *nousā iousā* etc.) and Lith. *mūsàs-is jūsàs-is* fem. *mūsó-ji jūsó-ji*,

whilst O.C.Sl. *našĭ vašĭ*, for **nās-i̯o- *vās-i̯o-*, have the suffix *-i̯o-*. Similarly we have poss. adj. W.Germ. *unsa-* 'our' from *uns* = **u̯s*, e. g. Frank. gen. *unses*, and O.Sax. *ūsa* O.Fris. *ūse* gen. pl. (§ 345 p. 246) like Lat. *nostrum* beside *nostrī*, and again on this analogy *iwa-* 'your'; Germ. *uns-era-* beside *unsa-* like Gr. *ἡμέ-τερο-ς* beside *ἁμό-ς* (§ 455).

The origin of Avest. *na-* 'our' was as follows. The possessive genitive *nō* = Skr. *nas*, when dependent upon a nom. sing. masc., was regarded as the nom. of an adj. stem in *-o-* (such as *ma-* 'meus') and was then declined in other cases on this supposition. Cp. Lat. *cuiu-s* 'belonging to whom' from *cuius* § 419 p. 342.

§ **455.** An *r*-suffix is seen in the gen. O.Icel. *vār* 'our' for **u̯ēr*, beside Goth. *veis* 'we', and O.H.G. *unsēr iuwēr*. We may conjecture that this is the same element which is seen in Armenian pronouns with gender (§ 419 p. 341), and which we find here in personal pronouns: sing. *iur* 'sui', with plural inflexion added *iureanc̣*, and *mer* 'nostri' *jer* 'vestri'. Perhaps *r* in these is the same as in adverbs like Goth. *hēr* 'here' *þar* 'there' (cp. p. 71 footnote), so that the original meaning of **u̯ēr* will be 'by, beside us' or something of the kind, and its use for the genitive might be compared with that of Skr. loc. *mē* and the like (see Johansson, Bezz. Beitr. XVI 123 ff., especially pp. 134 and 143). The reason why *-ēr* in O.H.G. *unsēr iuwēr* was never shortened (as it was in *fater* for pr. Germ. **fađēr*) is that these forms, which, like O.Sax. gen. pl. *ūsa iwa* (§ 454), were also used directly for the nom. sing. of the possessive adjective, fell under the influence of forms like *jenēr blintēr*, whose *-ēr* came from **-ai̯-z* (§ 414 p. 336); observe the different origin of the endings in *unsēr* and *unserēr*. Armen. *iur mer jer* are also poss. adj., gen. *iuroy meroy jeroy* (cp. § 450 p. 389), and O.Icel. *vār-r* 'noster' from the gen. *vār*.

With a comparative suffix Gr. *ἡμέ-τερο-ς ὑμέ-τερο-ς* and reflexive *σφέ-τερο-ς* (used for both plural and singular) and Lat. *nos-ter vos-ter* (*voster* doubtless simply on the analogy of

noster), Umbr. *vestra* abl. 'vestra', cp. II § 75 pp. 193, 195, § 139 p. 450. And as ἡμετέρου can hardly be distinguished in sense from ἡμῶν (the Author, Kuhn's Zeitschr. XXVII 403, 410, cp. τεοῖο § 452 p. 392), so *nostrī vestrī* along with the pluralised *nostrum vestrum* (first doubtless in phrases like *multī nostrum*) became the gen. of *nōs vōs*. The same *-tero-* is seen in the O.Ir. dual *nā-thar* and other words, § 459.

Remark. The different vowel in *noster* and *vester* is doubtless original. (If Osc. nistrus, Zvet. no. 129. 2, is to be explained with Bugge as 'nostros' — not so according to Bücheler, see I § 65 p. 54 — it must come from **nestro-*, and that must be regarded as an adformate of *vestro-*. Perhaps the difference in O.Ir. gen. 1st person *nā-thar* beside 2nd person *se-thar* (*se-* = **s-u̯e-*) is similar, compare § 457 on Skr. *nāu* : *vām*.

These forms with *-t(e)ro-* will serve to shew that the second comparative suffix *-(e)ro-* (II § 75 pp. 188 ff.) is to be seen in the following forms. O.Ir. gen. *ar n-* and *far n-* with the gen. pl. ending like Lat. *nostrum*, used for the possessive; *ar n-* probably (according to Torp, as cited, p. 41) for **ēsro-* = **n̥s-ro-* (with *-r-* for *-sr-* cp. *mīr* for **mēnsr-*, I § 574 p. 430) with the vowel of the first syllable weakened to *a* in proclitic position (explained differently by Thurneysen, see vol. II § 75 p. 196 footnote); and *far n-* similarly either for **s-u̯es-ro-* or for **s-u̯e-ro-*, — if the latter it must have been originally dual like *sethar* 'vester' (pl.), see § 459. Goth. *unsar izvar*, O.Icel. *yð(v)ar-r*, O.H.G. with strong ending *unserēr iuwerēr*, compare the gen. of the person. pron., Goth. *unsara izvara* O.Icel. *yð(v)ar*, like Goth. *meina* beside *mein-s*, O.Icel. *mīn* beside *min-n* (§ 452 with the Rem. pp. 392 f.); since *izvar iuwerēr* cannot be derived from **es-u̯es-ro-* **e-u̯es-ro-*, they were either dual at first, as O.Ir. *far n-* may have been, or else they are simply due to the analogy of *unsar unserēr*.

These forms with *-(e)ro-* and the subst. O.Icel. *vār* O.H.G. *unsēr* seem to be related in much the same way as Gr. ὕπερο-ς Lat. *s-uperu-s* and ὑπὲρ *s-uper*, or the like (II § 75 pp. 188 ff., III § 258 p. 159).

§ **456.** A formative suffix *-āka-* is shown in the Aryan genitives: Skr. *asmā́kam yuṣmā́kam*, Ved. also *asmā́ka yuṣmā́ka* doubtless following *máma táva* (conversely, Pali *mamaṃ tavaṃ* follow *amhākaṃ tumhākaṃ*); Avest. *ahmākem yušmākem xšmākem* O.Pers. *amāxam* (on this *-x-* see Bartholomae, Ar. Forsch. I 79). Connected with these are the possessives Skr. *asmā́ka-s yuṣmā́ka-s*, Avest. *ahmāka- yūšmāka- xšmāka-*. The forms in *-ākam* can hardly be anything but the nom. acc. sing. neuter, although the reason why this form was pitched upon is still unexplained; cp. *yuvā́ku*, used for the gen. dual, beside the adj. *yuvā́ku-ṣ* (§§ 458, 459). Cp. II § 36 pp. 257 f., § 89 p. 272 f.; Benfey, Abh. der Gött. Ges. der Wiss. XIX 4, 46; the Author, Kuhn's Zeitschr. XXVII 400 ff.; Torp, *op. cit.* p. 31. A different view — but one which if I may say so, smacks too much of the old "glottogonic" school — is taken by Johansson, Bezz. Beitr. XVI 139 f.

Remark. It is quite possible that *asmā́kam* was originally adverbial, with some meaning like 'on our side, by us'. Then the attributive use with nouns, e. g. *asmā́kā gāyatrā́ḥ* 'our song', was the same as in *tā́ imé vídūrā lōkā́ḥ* Çat. Brāh. 1. 4. 1. 23 'these are the far-sundered (lit. far apart, adv.) worlds', Gr. *ὁ νῦν χρόνος* etc. (see Goedicke, Acc. in Veda 233; Delbrück, Synt. Forsch. V 72, 203; Paul, Princ.[2] 314). The use of *máma táva* Avest. *mana tava* would also have had something to do with this idiom.

For the possessive, Sanskrit has also *asmad-ī́ya-s yuṣmad-ī́ya-s*, cp. *mad-ī́ya-s tvad-ī́ya-s* § 451 p. 391.

b. The Dual of *we* and *you* and of the Reflexive, together with their several Possessives.

Nominative and Accusative.

§ **457.** The main characteristic of the dual cases was the absence of the *s* of the forms used for the plural, Skr. *na-s va-s* etc.

Answering to the plural nom. **u̯e-i̯* 'we' the dual had **u̯e *u̯ē* (cp. **me *mē* Gr. *μὲ* Skr. *mā* and the like, § 415 Rem. p. 337). **u̯e*: Goth. O.Icel. *vi-t* A.S. *wi-t*, Lith. dial. *vè-du* fem. *vè-dvi*, but in H.Lith. *mù-du -dvi* (*vè-du* was orig. only

nom., *mù-du* only acc.; in one set of dialects *mùdu* was entirely levelled out, and *vèdu* in the other); Lith. *-du* and Goth. *-t* must both have been connected with the numeral *two* (Goth. *tvái*), but the manner in which the Goth. form was shortened to *-t* is not clear. **u̯ē*: O.C.Sl. *vě*, Skr. Ved. *vā́m* with the particle *-m*.

Answering to the plural nom. **i̯ūs* 'you' the dual had **i̯u* **i̯ū* (cp. **tu tū* 'thou' and the like, § 415 Rem. p. 337). **i̯u*: Lith. *jù-du* (also used as acc.), Goth. **ju-t* (by an accident, not actually found), instead of which in other dialects we find A.S. *ȝit* O.Sax. *git* H.G. Bavar. *eȝ* O.Icel. *it* influenced by *wit vit* (cp. § 441 p. 374). **i̯ū*: Skr. *yuvám* = *yū* + *am*.

In place of the plural acc. etc. Skr. *nas* Lat. *nōs* etc. the following forms appear in the dual: Skr. enclitic *nāu*, acc. gen. dat. like *nas*; Gr. *νώ* acc. nom., beside which in Homer is *νῶ-ι* perhaps with the deictic *-ι* (cp. the Author, Gr. Gr.[2] p. 132); O.C.Sl. *na* acc. dat. Thus there was in Idg. an enclitic **nō* (**nōu̯*), which in Greek, accented, took the place of the nom. as well, just as the plural Lat. *nōs* came to be used for the nominative too. And as the plural had **n̥s* (Goth. *uns*) beside **nōs*, so the dual had **n̥* beside **nō*, in acc. Goth. *ug-k* A.S. *un-c* with the particle *-k* like *mi-k*. Another form which must doubtless be added to the list is Skr. Ved. *āvā́m*; which may be derived from *ā-* = **n̥̄*, by assuming that it was extended on the analogy of *yuvā́m*, cp. below.

In place of the plural acc. etc. Skr. *vas* Lat. *vōs* etc. the following forms appear: Skr. enclitic *vām* (with the *m*-particle) acc. gen. dat. like *vas*; O.C.Sl. *va* acc. dat. nom. (its use for the nom. is not original). Does the contrast between Skr. *nāu* : *vām* indicate that the ground-form of the 2nd person was **u̯ē*, not **u̯ō*? (cp. § 455 Rem. p. 395). Answering to **n̥* (Goth. *ug-k*) there may have been a **u* in Germanic, acc. **u-ke*, which could become A.S. *inc* etc. by analogical change, see § 437. 2, *d* p. 370.

Skr. Ved. 1st person nom. *āvā́m* acc. *āvā́m*, 2nd person nom. *yuvā́m* acc. *yuvā́m*; in later Sanskrit the acc. forms

Tables showing the Inflexion of Personal and Reflexive Pronouns.

(Supplement to §§ 439—459).[1])

	Pr.Idg.	Sanskrit	Avestic	Arm.	Greek	Latin	Umbr.-Samn.	O.Irish	Gothic	O.H G.	Lith.	Pruss.	O.C.Sl.
Sing.													
Nom. 1	*e ĝ(h)o(m) *e ĝ(h)ō(m)	ahám	azem	es	ἐγώ ἐγών	ego	Osk. ťiium	[mē me-sse]	ik	ihha ih	esz asz	es as	azŭ
2	*tu *tū	tuvám tvám (adv. tú tū)	tū tvēm tūm	du	τύ σύ τύν-η τούν τούν-η	tū		tū tu-ssu	þu(þū?)	du dū	tù	tou	ty
Acc. 1.	*eme *me *mē(m)	mā mā́m, [mē]	mā mąm	z is	ἐμέ με μέν	me[mēd]		mē me-sse	mi-k	mi-h	manę̀ [mi]	mien	mę
2.	*t(u̯)e *t(u̯)ē(m)	tvā tvā́m, [tē]	þwā þwąm	z k̑e-z	σέ τέ (τϝέ)[τὺ] ϝέ ἕ ἑέ	tē [tēd]	Umbr. tiom	[tū tu-ssu]	[þu-k]	di-h	tarę̀ [ti]	tien	tę
3	*s(u̯)e *sē(m)					sē [sēd]	Osk. siom		si-k	si-h	sarę̀ [si]	siensin, -si	sę
Abl. 1.	*me-d, *mēd?	mád	maþ	y inēn		mēd mē							
2.	*tu̯e-d, *tēd?	tvád	þwaþ	i k̑ēn		tēd tē							
3.	*se-d, *sēd?		O.Pers. ša			adv. sed, sēd sē	Umbr. se-pse						
Dat. 1	*mega-, *mei̯ *moi̯	máhya(m), me	maibya -byō mā-vya, mę̄	inj	ἐμοί μοι [ἐμῑ́ν]	mihī, mī	Umbr. mehe	-m	mis	mir	mánei, mi	mennei	mine, mi
2.	*tebh-, *t(u̯)ei̯ *t(u̯)oi̯	túbhya(m), tē	taibyā -byō, tę̄	k̑ez	σοί adv. τοὶ [τῑ́ν τεῖν]	tibī	Umbr. tefe	-t	þus	dir	távei, ti	tebbei	tebě, ti
2	*sebh-, *s(u̯)ei̯ *s(u̯)oi̯	Prākr. sē	hvā-vya, hę̄ šę̄	iur	ϝοῖ οἱ οἱ, [ϝίν ἑίν σφί(ν)]	sibī	Osk. sífeí, Umbr. se-so		sis		sávei, si	sebbei	sebě, si
Loc. 1.	*mei̯ *moi̯	mé máyi			ἐμοί μοὶ, ἐμὶν	[medme]		-m	mis	mir	manyjè		mine
2.	*t(u̯)ei̯ *t(u̯)oi̯	tvḗ tváyi	þwōi		σοί, τίν τεῖν	[tēd tē]		-t	þus	dir	tavyjè		tebě
3	*s(u̯)ei̯ *s(u̯)oi̯				ϝοῖ οἷ οἱ, ϝίν ἑίν, [σφί(ν)]	[sēd sē]			sis		savyjè		sebě
Instr. 1.	*me *mo?	máyā		ine-v		me(?)					manimì	maim	munoją
2.	*t(u̯)e *t(u)o?	tvā́ tváyā	[taibyō]	k̑e-v		tē(?)					tavimì		toboją
3.	*s(u̯)e *s(u̯)ō?			iure-v	σ-φί(ν)	sē(?)					savimì		soboją
Gen. 1.	*eme, *mene, *mei̯ *moi̯	máma, me	mana, mę̄	im	ἐμεῖο ἐμοῦ, μεῦ μου, μοὶ	mei, mī, mīs		mo, Cymr. my n-	meina	min	manè manę̃s mãno	maisei	mene, mi
2.	*teu̯e, *t(u̯)ei̯ *t(u̯)oi̯	táva, tē	tava, tę̄	k̑o	σεῖο σοῦ, σοὶ	tuī, tīs		do, Mid. Cymr. teu	þeina	dīn	tavè tavę̃s tãvo	twaisei	tebe, ti
3.	*seu̯e, *s(u̯)ei̯ *s(u̯)oi̯	Prākr. sē	hę̄ šę̄	iur	εἷο οὗ. οἱ	suī	Umbr. sve-so (possess.)		seina	sīn	savè savę̃s sãvo		sebe, si
Plur.													
Nom. 1.	*u̯e-i̯, *u̯e-s?	vay-ám	vaęm	mek̑	ἄμμες. ἡμεῖς	[nōs]		[ni]	veis	wir	mẽs	mes	[my]
2.	*i̯us	yūyám	yūš yūž-em	duk̑	ὔμμες, ὑμεῖς	[vōs]		[si-ssi]	jūs	ir	jũs	ious	[vy]
Acc. 1.	*nes *nōs *n̥s, *n̥sme	nas, asmán	nō nå, ah-ma (?)	z mez	ἄμμε, ἧμας ἡμέας	nōs		ni sni -n	uns un-sis	unsih	mùs	mans	ny
2.	*u̯es *u̯ōs,	vas, yuṣmā́n	vō vå	z jez	ὔμμε, ὑμας	vōs		si-ssi -b	izvis	iuwih	jùs	vans	vy

Abl 1.	*n̥smea?	asmád	ahmaþ	i menj		[nōbīs]							
2	*usmed?	yuṣmád	yūšmaþxšmaþ	i jēnj		[vōbīs]							
Dat. 1.	*nes *n̥s, *n̥s-mei̯ -oi̯?, *n̥sme-bh-?	nas, asmḗ, as-mábhya(m)	nō, ahmaibyā, ahmāi	mez	[ἄμμιν ἄμμι ἡμῖν]	[nōbīs]		-n	unsun-sis	uns	mùms	noum(a)ns	namu, ny
2.	*u̯es *usmei̯ -oi̯?, *usme-bh-?	vas, yuṣmḗ, yuṣ-mábhya(m)	vō, yūšmaibyā, xšmāvya, yūšmaoyō	jez	[ὔμμιν ὔμμι ὑμῖν]	[vōbīs]		-b	izvis	iu	jùms	ioum(a)ns	vamŭ, vy
Loc. 1.	*n̥smi(n)? *n̥s-mei̯ -oi̯?	asmḗ, asmā́su			ἄμμιν ἄμμι ἡμῖν	nōbīs(?)					mūsu mūsyjè etc.		nasu
2.	*usmi(n)? *us-mei̯ -oi̯?	yuṣmḗ, yuṣmā́su			ὔμμιν ὔμμι ὑμῖν	vōbīs(?)					jūsu jūsyjè etc.		vasŭ
Instr. 1.	*n̥smē *n̥smō?	asmā́bhiṣ		mevk̑		nōbīs					mumìs mumì		nami
2.	*usmē *usmō?	yuṣmā́ yuṣmā́bhiṣ		jevk̑		vōbīs					jumìs jumì		vami
Gen. 1.	*nes *nōs, *n̥s-me?, n̥smei̯ -oi̯?	nas, asmḗ, as-mā́ka(m)	nō, ahmākem	mer	ἡμείων ἡμῶν	nostrī nostrum		ar -n	unsara	unser	músu	nouson	nasŭ
2.	*u̯es *u̯ōs, *us-me?, *usmei̯ -oi̯?	vas, yuṣmḗ, yuṣ-mā́ka(m)	vō, yūšmākem xšmākem	jer	ὑμείων ὑμῶν	vestrī vestrum		far -n, sethar	izvara	iuwēr	júsū	iouson	vasŭ
Du.													
Nom. 1.	*u̯e *u̯ē	vam, āvám āvā́m			[νώ νῶι]				vi-t	AS. wi-t	vè-du [mù-du]		vě
2.	*i̯u *i̯ū	yuvám yuvā́m			σφῶ σφῶι				*ju-t	AS. ʒi-t	jù-du		[va]
Acc. 1.	*nō(u̯), n̥ n̥̄?	nāu, āvā́m	āvā		νώ νῶι				ug-k ugkis	AS. un-c	mù-du [vè-du]		na
2.	*u̯ō? *u̯ē?	vām, yuvā́m			σφώ σφῶι				igqis	AS. inc	jù-du		va
Abl. 1.	?	āvád, āvā́bhyām											
2.	?	yuvád, yuvā́bhy-ām yuvábhyām											
Dat. 1.	*nō(u̯), n̥, n̥̄?	nāu, āvā́bhyām			νῶιν νῷν				ugkis	AS. un-c	mum mùdvëm		nama
2.	*u̯ō? *u̯ē?	vām, yuvā́bhyām yuvábhyām			σφῶιν σφῷν				igqis	AS. in-c	jum jùdvëm		vama
Loc. 1.	?	āváyōṣ			νῶιν νῷν						mùdvëse		naju
2.	?	yuvṓṣ yuváyōṣ			σφῶιν σφῷν						jùdvëse		vaju
Instr. 1.	?	āvā́bhyām			νῶιν νῷν						mum mùdvëm		nama
2.	?	yuvā-, yuvā́bhyām yuvábhyām			σφῶιν σφῷν						jum jùdvüm		vama
Gen. 1.	*nō(u̯) n̥, n̥̄?	nāu, āváyōṣ			νῶιν νῷν			nathar nār	ugkara	AS. uncer	mumū mùma mùdvëjū		naju
2.	*u̯ō *u̯ē?	vām, yuvā́ku, yu-vṓṣ yuváyōṣ	yuvākem		σφῶιν σφῷν			fathar sar (Mid.Ir.)	igqara	AS. incer	jumū jùma jùdvëjū		vaju

1) Forms from the several languages which belong to the place where they stand only by right of usage, aud in form belong to another, are enclosed in square brackets [ ]. Spaced Type denotes that a form may be considered as regularly descended from the form of the parent language.

could be used for the nom. too. Avest. acc. *āvā*. Probably the nom. *yuvám* had (in pr. Ar.) produced an acc. *yuvā́m* on the analogy of *tuvám tvám* : *tuvā́m tvā́m*. An acc. **yuvā*, following *tuvā tvā*, is indicated by Avest. *āvā*. Cp. abl. *yuvád* following *tuvád tvád*. And then, apparently to get similar forms for the 1st person, there were formed *āvám* Skr. *āvā́m* Avest. *āvā* (cp. abl. *āvád*), the kernel for these being *ā-* = **n̥̄*; *ā-* = **n̥̄* : **n̥-* in Goth. *ug-k*, as **i̯ū-* : **i̯u-*. Similarly in the plural, but by the opposite attraction, Skr. *yū-yám* follows *vay-ám*, see § 458.

Distinct from all the forms hitherto mentioned is Gr. *σφώ* 'you two', Hom. *σφῶι* (like *νῶ-ι* above). A conjecture on its origin is given in § 436 Rem. 3 page 368.

Reflexive: Hom. acc. *σφωέ*, a kind of dualisation of *σφέ* by intrusion of *ω*, like *σφωΐν* following *σφίν*.

The Remaining Cases, and the Possessives.

§ **458.** Aryan. There is nothing of the dual in the case ending of any of the following forms: Ablative Skr. Ved. *āvád yuvád*: cp. *tvád*. Instrumental *yuvā́* in Ved. *yuvā́-datta-s*: cp. *tvā́-datta-s yuṣmā́-datta-s*. Genitive Avest. *yuvākem*, like *yūšmākem*, but Skr. Ved. *yuvā́ku yuvā́kuṣ* with the adj. *yuvā́ku-ṣ* as contrasted with *yuṣmā́kam* with the adj. *yuṣmā́ka-s*: this *āku*-formation and the use of the adjective *yuvā́ku-ṣ* suggest that there may be some close connexion between these and *yuvāyú-ṣ yuvayú-ṣ tvāyú-s* and the like (cp. § 456 p. 396, and the references there given). On the other hand, dual inflexion is seen in gen. loc. *āváyōṣ yuváyōṣ* (beside which Vedic has *yuvṓṣ*), to be explained as we have explained *ēnōṣ* : *ēnayōṣ* (§ 307 p. 205), or else as being derived straight from **yū*, the form from which *yuvám* comes (cp. *sūnū́* : *sūnv-ṓṣ*); and in dat.-abl. instr. *āvā́-bhyām yuvā́-bhyām* beside *yuvá-bhyām* (cp. J. Schmidt, Pluralb. 20).

Greek. Hom. *νῶιν σφῶιν* Att. *νῷν σφῷν*. Cp. *τοῖ-ιν* § 312 p. 211. Does *νῶιν* come from **νω-σιν*? It is also

possible that *νῶιν* like *ἐμίν* was modelled upon *ἄμμιν*, and being associated with *τοῖιν ἵπποιιν* came to have the same functions.

Lat. *nō-bīs vō-bīs* may be regarded as old dual cases (cp. O.C.Sl. *na-ma va-ma*) whose suffix has been pluralised by association with the type of *istīs*, see § 445 p. 382. This is not the only instance of a form passing into the plural system when the dual has died out: a parallel is Bavar. *ez enk* used for the plural. Much the same thing is seen in Norse dialects; see Johansson, Kuhn's Zeitschr. XXX 551. Compare the Latin dual *duae, equae* used for the plural, § 286 p. 194, § 315 p. 215.[1])

O.Ir. gen. *nāthar nār* Mid.Ir. *fathar sar*, see § 459.

Germanic. Round about the form **un-ke* = Goth. *ugk* (§ 457), whose *k* was regarded as parallel to the *s* of *uns* and so lumped together with the stem, were produced Goth. *ugkis ugkara* following *unsis unsara*, O.Sax. gen. *unkero* gen. pl. of the possessive like *ūsa*, dat. *unk* for **unkiz* like *iu* for **iu̯uiz*, O.H.G. gen. *unkēr* following *unsēr*. Similarly in the 2nd person Goth. *igqis igqara* (*-ku̯-* following *-zv-* in *izvis izvara*) O.Sax. *ink*. A.S. acc. *uncit incit*, beside dat. *unc inc*, with *-it* following the nom. *wit ʒit*.

Balto-Slavonic. O.C.Sl. *na-ma va-ma* like *rąka-ma*, but *na-ju va-ju* as contrasted with *rąku toju*. Lithuanian shows a multitude of forms distributed among the different dialects. Dat. instr. *mu-m ju-m* beside *mù-du jù-du* (§ 457 pp. 396 f.), as in the plural *mù-ms jù-ms* and *mu-mìs ju-mìs*; also *mum-dvëm jum-dvëm*. Then *mum* and *jum* served as a kernel for the gen. O.Lith. *mumu jumu* with the *-ū* of the gen. plural (cp. gen. dual *dvëmu*, Brückner, Arch. slav. Phil., III 310), and for the dat. *mumëm*; there are also gen. *mùma jùma* (used as the poss. gen.), which are found in districts where *mãno tãvo* have regularly become *mãna tãva*, and therefore are without doubt modelled after them. Elsewhere

1) So now Bartholomae, Stud. zur idg. Spr., I 7.

the case-system is filled up by a form made up of *ve-*, *mu-*, or *ju-* + *-du*, but not always in the same way. High Lith. gen. *mù-dvëjū jù-dvëjū* dat. instr. *mù-dvëm jù-dvëm* loc. *mù--dvëse jù-dvëse.* But in other parts the structure of *vè-du mù-du* and *jù-du* became so much obscured, that they came under the influence of *súnu* as though they were *vèd-u* etc.: hence gen. *vèdums mùdums*, *jùdums* (cp. *sūnu-ms* § 310 p. 207), dat. instr. *vèdum mùdum*, *jùdum*; so too we find in the same neighbourhoods gen. *tůdums* dat. instr. *tůdum* from nom. *tů-du* (beside *tà-s* 'the, that').

§ **459.** Possessives. Skr. Ved. *yuvâku-ṣ*. Gr. Hom. *νωΐ--τερο-ς σφωΐ-τερο-ς*, cp. *ἡμέ-τερο-ς*. O.Ir. *nā-thar* and *nā-r* in *cechtar nāthar*, *cechtar nār* 'each of us two', which we may conjecture to be gen. pl. like *ar n-* (§ 455 p. 395); *nā-* for **nō-*. So too the O.Ir. *se-thar* — *sethar(-si)* Wb. 1[b] is glossed accentuated 'vestram', plural — which is connected with **s-u̯e-*, must originally have been dual, as is still Mid.Ir. *nechthar fathar* 'one of you two' (*fathar* is doubtless a transformation of *sethar* on the analogy of *far*), and possibly Mid.Ir. *sar* in *indala-sar* 'one of you two' and the possessive genitive *far n-* (cp. *loc. cit.*). Gothic *igqar* (*ugkar* not found, but may be assumed from gen. *ugkara*), O.Icel. *okkar-r ykkar-r*, O.Sax. gen. pl. *unkero.*

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